```
=> fil embase
FILE 'EMBASE' ENTERED AT 11:37:39 ON 04 SEP 2003
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 FILE COVERS 1974 TO 28 Aug 2003 (20030828/ED)

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 This file contains CAS Registry Numbers for easy and accurate
 substance identification.

=> e anxiety disorder+all/ct
E1            0   BT2   Psychological and psychiatric phenomena/CT
E2        38306    BT1   mental disease/CT
E3         1440     -->   anxiety disorder/CT
E4         3119     MN    F3.60./CT
                     HNTE  Creation date  25 JUL 19: 96
E5            0      UF    anxiety disorders/CT
E6           72      NXT   acute stress disorder/CT
E7         8317      NXT   anxiety neurosis/CT
E8            6      NXT   cardiac anxiety/CT
E9         5317      NXT   distress syndrome/CT
E10         135      NXT   generalized anxiety disorder/CT
E11           4      NXT   koro/CT
E12           7      NXT   mixed anxiety and depression/CT
E13        7169      NXT   panic/CT
E14        6849      NXT   posttraumatic stress disorder/CT
E15          93      NXT   psychasthenia/CT
E16         786      NXT   separation anxiety/CT
E17         520      NT1   obsessive compulsive disorder/CT
E18        4116      NT1   phobia/CT
********** END***
```

National Library of Medicine - Medical Subject Headings

2003 MeSH

MeSH Descriptor Data

Return to Entry Page

MeSH Heading	Stress Disorders, Traumatic
Tree Number	F03.080.931
Annotation	STRESS DISORDERS, TRAUMATIC, ACUTE is also available
Scope Note	Anxiety disorders manifested by the development of characteristic symptoms following a psychologically traumatic event that is outside the normal range of usual human experience. Symptoms include re-experiencing the traumatic event, increased arousal, and numbing of responsiveness to or reduced involvement with the external world. Traumatic stress disorders can be further classified by the time of onset and the duration of these symptoms.
Entry Term	Stress Disorders
Allowable Qualifiers	BL CF CI CL CO DH DI DT EC EH EN EP ET GE HI IM ME MI MO NU PA PC PP PS PX RA RH RI SU TH UR US VI
Entry Version	TRAUMATIC STRESS DIS
Previous Indexing	Stress Disorders, Post-Traumatic (1980-2002)
Previous Indexing	Stress, Psychological (1965-2002)
History Note	2003
Unique ID	D040921

MeSH Tree Structures

Mental Disorders [F03]
- Anxiety Disorders [F03.080]
  - Agoraphobia [F03.080.100]
  - Neurocirculatory Asthenia [F03.080.500]
  - Obsessive-Compulsive Disorder [F03.080.600]
  - Panic Disorder [F03.080.700]
  - Phobic Disorders [F03.080.725]
  - ▶ Stress Disorders, Traumatic [F03.080.931]
    - Combat Disorders [F03.080.931.249]
    - Stress Disorders, Traumatic, Acute [F03.080.931.374]
    - Stress Disorders, Post-Traumatic [F03.080.931.500]

Return to Entry Page **Link to NLM Cataloging Classification**

```
=> fil capl; d que l11
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FILE COVERS 1907 - 4 Sep 2003  VOL 139 ISS 10
FILE LAST UPDATED: 2 Sep 2003  (20030902/ED)

  This file contains CAS Registry Numbers for easy and accurate
  substance identification.


L4          5087 SEA FILE=CAPLUS ABB=ON  ANXIETY/CT
L5          4603 SEA FILE=CAPLUS ABB=ON  ANXIOLYTICS/CT
L6           422 SEA FILE=CAPLUS ABB=ON  ANTIANXIETY/OBI
L7          3540 SEA FILE=CAPLUS ABB=ON  (NERVOUSNESS OR PANIC OR PHOBI## OR
                 AGORAPHOBI? OR NEUROCIRCULATORY ASTHENI? OR OBSESSI?(A)COMPULSI
                 ? OR (COMBAT OR STRESS)(L)DISORDER#)/OBI
L8         21769 SEA FILE=CAPLUS ABB=ON  POTASSIUM(L)CHANNEL#/OBI
L9           310 SEA FILE=CAPLUS ABB=ON  KCNQ#
L10          242 SEA FILE=CAPLUS ABB=ON  L8 AND L9
L11           10 SEA FILE=CAPLUS ABB=ON  L10 AND (L4 OR L5 OR L6 OR L7)


=> fil medl; d que l19

FILE 'MEDLINE' ENTERED AT 11:48:56 ON 04 SEP 2003

 FILE LAST UPDATED: 3 SEP 2003 (20030903/UP).  FILE COVERS 1958 TO DATE.

 On April 13, 2003, MEDLINE was reloaded.  See HELP RLOAD for details.

 MEDLINE thesauri in the /CN, /CT, and /MN fields incorporate the
 MeSH 2003 vocabulary.  See http://www.nlm.nih.gov/mesh/changes2003.html
 for a description on changes.

 This file contains CAS Registry Numbers for easy and accurate
 substance identification.


L12        54616 SEA FILE=MEDLINE ABB=ON  ANXIETY/CT OR ANXIETY DISORDERS+NT/CT

L13          402 SEA FILE=MEDLINE ABB=ON  KCNQ#
L14        17275 SEA FILE=MEDLINE ABB=ON  POTASSIUM CHANNELS+NT/CT
L17         4144 SEA FILE=MEDLINE ABB=ON  ANTI-ANXIETY AGENTS/CT
L19            7 SEA FILE=MEDLINE ABB=ON  (L12 OR L17) AND (L13 OR L14)


=> fil embase; d que l35; d que l36
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 FILE COVERS 1974 TO 28 Aug 2003 (20030828/ED)

 EMBASE has been reloaded. Enter HELP RLOAD for details.

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 substance identification.


L25          377 SEA FILE=EMBASE ABB=ON  POTASSIUM CHANNEL AFFECTING AGENT/CT
L26         1473 SEA FILE=EMBASE ABB=ON  POTASSIUM CHANNEL STIMULATING AGENT/CT

L27        34146 SEA FILE=EMBASE ABB=ON  ANXIETY/CT
L28        30320 SEA FILE=EMBASE ABB=ON  ANXIETY DISORDER+NT/CT
L29         4612 SEA FILE=EMBASE ABB=ON  ANXIOLYTIC AGENT/CT
L35            7 SEA FILE=EMBASE ABB=ON  (L25 OR L26) AND (L27 OR L28 OR L29)



L20           52 SEA FILE=EMBASE ABB=ON  KCNQ
L27        34146 SEA FILE=EMBASE ABB=ON  ANXIETY/CT
L28        30320 SEA FILE=EMBASE ABB=ON  ANXIETY DISORDER+NT/CT
L29         4612 SEA FILE=EMBASE ABB=ON  ANXIOLYTIC AGENT/CT
L36            0 SEA FILE=EMBASE ABB=ON  L20 AND (L27 OR L28 OR L29)


=> fil drugu; d que l50

FILE 'DRUGU' ENTERED AT 11:48:57 ON 04 SEP 2003
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FILE LAST UPDATED: 4 SEP 2003       <20030904/UP>
>>>  DERWENT DRUG FILE (SUBSCRIBER)  <<<

>>>  SDI'S MAY BE RUN WEEKLY OR MONTHLY AS OF JUNE 2001.  <<<
>>>  (WEEKLY IS THE DEFAULT). FOR PRICING INFORMATION     <<<
>>>  SEE HELP COST                                        <<<

>>>  FILE COVERS 1983 TO DATE  <<<
>>>  THESAURUS AVAILABLE IN /CT  <<<



L37         5286 SEA FILE=DRUGU ABB=ON  ANXIETY/CT
L38           22 SEA FILE=DRUGU ABB=ON  KCNQ#
L40          107 SEA FILE=DRUGU ABB=ON  POTASSIUM-CHANNEL/CT
L41            4 SEA FILE=DRUGU ABB=ON  POTASSIUM-CHANNEL-OPENER/CT
L42         1381 SEA FILE=DRUGU ABB=ON  POTASSIUM-AGONIST/CT
L43         4468 SEA FILE=DRUGU ABB=ON  NERVOUSNESS OR PANIC OR PHOBI## OR
                 AGORAPHOBI? OR NEUROCIRCULATORY ASTHENI? OR OBSESSI?(A)COMPULSI
                 ?
L44          281 SEA FILE=DRUGU ABB=ON  (COMBAT OR STRESS)(W)DISORDER#
L45         2722 SEA FILE=DRUGU ABB=ON  DISTRESS SYNDROME# OR KORO OR PSYCHASTHE
                 NI?
L47         4168 SEA FILE=DRUGU ABB=ON  ANXIOLYTIC?
L50            0 SEA FILE=DRUGU ABB=ON  (L38 OR (L40 OR L41 OR L42)) AND (L37
                 OR (L43 OR L44 OR L45) OR L47)


=> fil wpids; d que l58
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FILE 'WPIDS' ENTERED AT 11:48:58 ON 04 SEP 2003
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FILE LAST UPDATED:          3 SEP 2003      <20030903/UP>
MOST RECENT DERWENT UPDATE:     200356        <200356/DW>
DERWENT WORLD PATENTS INDEX SUBSCRIBER FILE, COVERS 1963 TO DATE


>>> NEW WEEKLY SDI FREQUENCY AVAILABLE --> see NEWS  <<<

>>> PATENT IMAGES AVAILABLE FOR PRINT AND DISPLAY <<<

>>> FOR A COPY OF THE DERWENT WORLD PATENTS INDEX STN USER GUIDE,
    PLEASE VISIT:
 http://www.stn-international.de/training_center/patents/stn_guide.pdf <<<



L51          28 SEA FILE=WPIDS ABB=ON  KCNQ#
L52         809 SEA FILE=WPIDS ABB=ON  POTASSIUM(1A)CHANNEL#
L53        7152 SEA FILE=WPIDS ABB=ON  ANXIETY OR ANXYOLYTIC?
L54        2796 SEA FILE=WPIDS ABB=ON  DISTRESS SYNDROME# OR KORO OR PSYCHASTHE
                NI?
L55         487 SEA FILE=WPIDS ABB=ON  (COMBAT OR STRESS)(W)DISORDER#
L56        2793 SEA FILE=WPIDS ABB=ON  NERVOUSNESS OR PANIC OR PHOBI## OR
                AGORAPHOBI? OR NEUROCIRCULATORY ASTHENI? OR OBSESSI?(A)COMPULSI
                ?
L58           9 SEA FILE=WPIDS ABB=ON  L51 AND L52 AND (L53 OR L54 OR L55 OR
                L56)

=> dup rem l19,l11,l35,l58

FILE 'MEDLINE' ENTERED AT 11:49:00 ON 04 SEP 2003

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PROCESSING COMPLETED FOR L19
PROCESSING COMPLETED FOR L11
PROCESSING COMPLETED FOR L35
PROCESSING COMPLETED FOR L58
L59          25 DUP REM L19 L11 L35 L58 (8 DUPLICATES REMOVED)
                ANSWERS '1-7' FROM FILE MEDLINE
                ANSWERS '8-17' FROM FILE CAPLUS
                ANSWERS '18-23' FROM FILE EMBASE
                ANSWERS '24-25' FROM FILE WPIDS

=> d ibib ab 1-25; fil hom

L59  ANSWER 1 OF 25     MEDLINE on STN                    DUPLICATE 6
ACCESSION NUMBER:    2001517919     MEDLINE
DOCUMENT NUMBER:     21449148   PubMed ID: 11564458
TITLE:               GIRK2 deficient mice. Evidence for hyperactivity and
                     reduced anxiety.
AUTHOR:              Blednov Y A; Stoffel M; Chang S R; Harris R A
```

CORPORATE SOURCE: Waggoner Center for Alcohol and Addiction Research, University of Texas, A4800, 2500 Speedway, MBB 1.124, Austin, TX 78712-1095, USA.. yablednov@mail.utexas.edu
CONTRACT NUMBER: AA03527 (NIAAA)
AA06399 (NIAAA)
SOURCE: PHYSIOLOGY AND BEHAVIOR, (2001 Sep 1-15) 74 (1-2) 109-17.
Journal code: 0151504. ISSN: 0031-9384.
PUB. COUNTRY: United States
DOCUMENT TYPE: Journal; Article; (JOURNAL ARTICLE)
LANGUAGE: English
FILE SEGMENT: Priority Journals
ENTRY MONTH: 200110
ENTRY DATE: Entered STN: 20010924
Last Updated on STN: 20011029
Entered Medline: 20011025

AB G-protein activated inwardly rectifying potassium channel (GIRK2)-deficient (null mutant) mice were examined in three tests for anxiety: the elevated plus-maze, light/dark box and "canopy" test. In the elevated plus-maze test, GIRK2 null mutant mice spent a higher percentage of time in the open arms and showed a higher number of total entries. A short (6 days) period of social isolation decreased anxiety and also increased the total activity in GIRK2 mutant mice. However, the increase of total activity in GIRK2 null mutant mice was mostly due to an increase in the number of entries into the open arms. The behavior of the wild-type animals was not substantially changed after social isolation. In the light/dark box, GIRK2 homozygous (-/-) mice demonstrated a higher level of locomotion and a higher number of rearings in the light area. In the "canopy" test, GIRK2 mutant mice displayed an increased locomotion in the exposed area and a strong trend to decrease in the number of stretched attend postures (SAP) in the most secure "canopy" area. GIRK2 heterozygous (+/-) animals showed behavioral changes intermediate between wild-type and null mutants only in the elevated plus-maze test after social isolation. In all other tests, GIRK2 heterozygous (+/-) animals did not differ from wild-type mice. Taken together, this data demonstrates that GIRK2 null mutant mice have reduced anxiety with signs of hyperactivity. We suggest that the functional block of dopamine D3 receptors may be a reason for this phenotype.

L59 ANSWER 2 OF 25 MEDLINE on STN
ACCESSION NUMBER: 2001403747 MEDLINE
DOCUMENT NUMBER: 21348234 PubMed ID: 11454913
TITLE: Potassium channels as targets for ethanol: studies of G-protein-coupled inwardly rectifying potassium channel 2 (GIRK2) null mutant mice.
AUTHOR: Blednov Y A; Stoffel M; Chang S R; Harris R A
CORPORATE SOURCE: Waggoner Center for Alcohol and Addiction Research and Section of Neurobiology, University of Texas at Austin, Texas 78712-1095, USA.. yablednov@mail.utexas.edu
CONTRACT NUMBER: AA03527 (NIAAA)
AA06399 (NIAAA)
SOURCE: JOURNAL OF PHARMACOLOGY AND EXPERIMENTAL THERAPEUTICS, (2001 Aug) 298 (2) 521-30.
Journal code: 0376362. ISSN: 0022-3565.
PUB. COUNTRY: United States
DOCUMENT TYPE: Journal; Article; (JOURNAL ARTICLE)
LANGUAGE: English
FILE SEGMENT: Priority Journals
ENTRY MONTH: 200108
ENTRY DATE: Entered STN: 20010813
Last Updated on STN: 20010813
Entered Medline: 20010809

AB G-Protein-coupled inwardly rectifying potassium channels (GIRKs) regulate synaptic transmission and neuronal firing rates. Selective enhancement of

GIRK2 function by intoxicating concentrations of ethanol was recently shown for recombinant homomeric and heteromeric channels. We proposed that specific behavioral actions of ethanol are due to activation of GIRK channels and that these behaviors would be reduced or eliminated in GIRK2 null mutant ("knockout") mice. Three behavioral effects of ethanol were absent in mutant mice as compared with wild-type littermates: stimulation of home cage (habituated) motor activity, anxiolytic action in elevated-plus maze test, and handling-induced convulsions (HIC) after an acute injection of ethanol. In contrast to these reductions of ethanol action, mutant mice displayed greater ethanol-stimulated activity in peripheral regions of an open field. There were no differences between mutant and wild-type mice for ethanol-induced sleep time, acute functional tolerance, or HIC following chronic matched consumption of a liquid diet. Ethanol preference and consumption were equal for wild-type and mutant mice using the standard two-bottle choice test with alternation of the bottles. However, this test was complicated by the strong side preference of the mice. When ethanol was presented constantly in their favored location, the consumption of ethanol was substantially higher for mutant than for wild-type mice. In the absence of ethanol, GIRK2 knockout mice showed more motor activity, less anxiety, and higher HIC. These results provide evidence that GIRK2 channels mediate specific behaviors, including anxiety and convulsions, and may influence effects of ethanol on these behaviors.

L59 ANSWER 3 OF 25 MEDLINE on STN
ACCESSION NUMBER: 1999370097 MEDLINE
DOCUMENT NUMBER: 99370097 PubMed ID: 10440734
TITLE: Anxiety and increased 5-HT1A receptor response in NCAM null mutant mice.
AUTHOR: Stork O; Welzl H; Wotjak C T; Hoyer D; Delling M; Cremer H; Schachner M
CORPORATE SOURCE: Department of Neurobiology, Swiss Federal Institute of Technology, Honggerberg, CH 8093 Zurich, Switzerland.
SOURCE: JOURNAL OF NEUROBIOLOGY, (1999 Sep 5) 40 (3) 343-55.
Journal code: 0213640. ISSN: 0022-3034.
PUB. COUNTRY: United States
DOCUMENT TYPE: Journal; Article; (JOURNAL ARTICLE)
LANGUAGE: English
FILE SEGMENT: Priority Journals
ENTRY MONTH: 199912
ENTRY DATE: Entered STN: 20000113
Last Updated on STN: 20000113
Entered Medline: 19991220

AB Mice deficient in the neural cell adhesion molecule (NCAM) show behavioral abnormalities as adults, including altered exploratory behavior, deficits in spatial learning, and increased intermale aggression. Here, we report increased anxiety-like behavior of homozygous (NCAM-/-) and heterozygous (NCAM/-) mutant mice in a light/dark avoidance test, independent of genetic background and gender. Anxiety-like behavior was reduced in both NCAM+/+ and NCAM-/- mice by systemic administration of the benzodiazepine agonist diazepam and the 5-HT1A receptor agonists buspirone and 8-OH-DPAT. However, NCAM-/- mice showed anxiolytic-like effects at lower doses of buspirone and 8-OH-DPAT than NCAM+/+ mice. Such increased response to 5-HT1A receptor stimulation suggests a functional change in the serotonergic system of NCAM-/- mice, likely involved in the control of anxiety and aggression. However, 5-HT1A receptor binding and tissue content of serotonin and its metabolite 5-hydroxyindolacetic acid were found unaltered in every brain area of NCAM-/- mice investigated, indicating that expression of 5-HT1A receptors as well as synthesis and release of serotonin are largely unchanged in NCAM-/- mice. We hypothesize a critical involvement of endogenous NCAM in serotonergic transmission via 5-HT1A receptors and inwardly rectifying K+ channels as the respective effector systems.

L59 ANSWER 4 OF 25 MEDLINE on STN
ACCESSION NUMBER: 1998355523 MEDLINE
DOCUMENT NUMBER: 98355523 PubMed ID: 9692774
TITLE: Tandospirone-induced K+ current in acutely dissociated rat dorsal raphe neurones.
AUTHOR: Jin Y H; Akaike N
CORPORATE SOURCE: Department of Physiology, Faculty of Medicine, Kyushu University, Fukuoka, Japan.
SOURCE: BRITISH JOURNAL OF PHARMACOLOGY, (1998 Jul) 124 (5) 897-904.
Journal code: 7502536. ISSN: 0007-1188.
PUB. COUNTRY: ENGLAND: United Kingdom
DOCUMENT TYPE: Journal; Article; (JOURNAL ARTICLE)
LANGUAGE: English
FILE SEGMENT: Priority Journals
ENTRY MONTH: 199810
ENTRY DATE: Entered STN: 19981020
Last Updated on STN: 20030118
Entered Medline: 19981002

AB 1. The effects of tandospirone (TDS) on dissociated rat dorsal raphe neurones were investigated using the patch-clamp method. 2. Under current-clamp conditions, TDS hyperpolarized the cell membrane, resulting in the reduction of firing rates. 3. Under voltage-clamp conditions, TDS induced an inward rectifying K+ current in a concentration-dependent manner. 4. The TDS-induced K+ currents (I(TDS)) were mimicked by 8-OH-DPAT, a 5-HT1A agonist. The I(TDS) was blocked by spiperone, a 5-HT1A receptor antagonist, in a concentration-dependent manner. 5. N-Ethylmaleimide, an agent which uncouples between the receptor and the G-protein, irreversibly blocked the I(TDS). 6. In neurones perfused intracellularly with a pipette-solution containing GTP using the conventional whole-cell patch recording, the I(TDS) showed a gradual rundown. When the neurones were perfused with GTPgammaS, TDS activated the inwardly rectifying K+ current in an irreversible manner. 7. In the inside-out patch recording mode, TDS-activated single K+ channel currents (i(TDS)) which also showed an inward rectification. When the GDP in cytosolic side was completely replaced with GTP, the open probability of i(TDS) significantly increased. 8. These results indicate that the activation of 5-HT1A receptors by TDS directly opens the inward rectifying K+ channels via a G-protein mediated process.

L59 ANSWER 5 OF 25 MEDLINE on STN
ACCESSION NUMBER: 97345357 MEDLINE
DOCUMENT NUMBER: 97345357 PubMed ID: 9201724
TITLE: A new approach to innovating selective anxiolytics: pharmacological profile of a novel 5-HT1A agonist (tandospirone).
AUTHOR: Sasa M
CORPORATE SOURCE: Department of Pharmacology, Hiroshima University School of Medicine, Japan.
SOURCE: NIHON SHINKEI SEISHIN YAKURIGAKU ZASSHI, (1997 Apr) 17 (2) 53-9. Ref: 33
Journal code: 9509023. ISSN: 1340-2544.
PUB. COUNTRY: Japan
DOCUMENT TYPE: Journal; Article; (JOURNAL ARTICLE)
General Review; (REVIEW)
(REVIEW, TUTORIAL)
LANGUAGE: Japanese
FILE SEGMENT: Priority Journals
ENTRY MONTH: 199709
ENTRY DATE: Entered STN: 19970916
Last Updated on STN: 19970916

Entered Medline: 19970904

AB Tandospirone (sedil) is a newly developed anxiolytic drug that has a much higher selective affinity for 5-HT1A than dopamine D2 receptors without the binding affinities with noradrenergic, dopaminergic, cholinergic and GABAergic receptors. This agent binds with 5-HT1A receptors located in both 5-HT neurons in the raphe nucleus and other postsynaptic neurons to induce hyperpolarization of the neurons by opening the K+ channels to eventually inhibit the target neuronal activities. With repeated administrations of tandospirone, a decrease in 5-HT2A receptor population was observed. Behavioral studies in experimental animals have demonstrated that tandospirone inhibits conflict in Vogel methods, aggressive behavior and muricide in manners similar to those of diazepam. In addition, tandospirone showed antistress effects in experimental models and antidepressive effects in forced swimming tests. Unlike diazepam, tandospirone does not produce sedative, sleep-inducing, anticonvulsant, nor muscle relaxant effects at doses effective for conflict tests. Drug dependance, one of the serious problems with bezodiazepine, is not observed with repeated treatment of tandospirone in rats and monkeys. Furthermore, tandospirone has been reported to show a significantly more superior or equipotent effect to diazepam in controlling autonomic disturbances, psychiatric cardiovascular and vegetative syndromes as well as neurosis in double blind clinical studies. These effects are probably due to the selective action of tandospirone on 5-HT1A receptors in the limbic system to eventuate anxiolytic and antidepressant effects. A decrease in 5-HT2A receptor population with repeated treatment of tandospirone may have contributed to the antidepressive effect. Furthermore, 5-HT1A receptors relatively, selectively distributed in the limbic system are not involved in sedation, sleep or muscle relaxation. Such unwanted effects of benzodiazepines are thus not observed with tandospirone treatment.

L59 ANSWER 6 OF 25 MEDLINE on STN
ACCESSION NUMBER: 96033231 MEDLINE
DOCUMENT NUMBER: 96033231 PubMed ID: 8568632
TITLE: 5-HT3 receptor-independent inhibition of the depolarization-induced 86Rb efflux from human neuroblastoma cells, TE671, by ondansetron.
AUTHOR: Toral J; Hu W; Critchett D; Solomon A J; Barrett J E; Sokol P T; Ziai M R
CORPORATE SOURCE: CV/CNS Research Section, American Cyanamid Company, Lederle Laboratories, Pearl River, New York 10965, USA.
SOURCE: JOURNAL OF PHARMACY AND PHARMACOLOGY, (1995 Jul) 47 (7) 618-22.
Journal code: 0376363. ISSN: 0022-3573.
PUB. COUNTRY: ENGLAND: United Kingdom
DOCUMENT TYPE: Journal; Article; (JOURNAL ARTICLE)
LANGUAGE: English
FILE SEGMENT: Priority Journals
ENTRY MONTH: 199603
ENTRY DATE: Entered STN: 19960315
Last Updated on STN: 19970203
Entered Medline: 19960307

AB The 5-HT3 receptor antagonist, ondansetron, has been shown to have positive effects in selected in-vivo models of memory impairment and anxiety. The exact mechanisms underlying such bioactivities are unknown. In the present work, an 86Rb efflux bioassay was used to show that ondansetron has a unique ability to block voltage-gated potassium channels in TE671 human neuroblastoma cells. This intrinsic potassium-channel-blocking (KCB) property is relatively weak (IC50 20 microM), but is not shared by other 5-HT3-receptor ligands including zatosetron, MDL 72222, LY 278, 584, zacopride, 1-phenylbiguanide, and ICS 205-930 (tropisetron). Pre-incubation of the target neuroblastoma cells with several 5-HT-receptor ligands including 5-hydroxytryptamine, 8-OH-DPAT,

ketanserin, 2-methyl-5-HT, as well as a number of potent 5-HT3 agonists and antagonists and two selective neurotoxins, failed to abolish the KCB action of ondansetron. A preliminary structure-activity relationship analysis indicates that the KCB activity of ondansetron is almost entirely attributable to its structural nucleus, 2,3-dihyro-9-methyl-4(1H)-carbazolone. It is hypothesized that the KCB action of ondansetron is mediated through receptors other than 5-HT3 receptors. The KCB activity of ondansetron may be a significant factor in the in-vivo cognition-enhancing activities of this compound, conceivably due to depolarization of the hippocampal synaptic membranes and a consequent augmentation of neurotransmission.

L59 ANSWER 7 OF 25 MEDLINE on STN
ACCESSION NUMBER: 91333774 MEDLINE
DOCUMENT NUMBER: 91333774 PubMed ID: 1714550
TITLE: K+ channel and 5-hydroxytryptamine1A autoreceptor interactions in the rat dorsal raphe nucleus: an in vitro electrophysiological study.
AUTHOR: Haj-Dahmane S; Hamon M; Lanfumey L
CORPORATE SOURCE: INSERM U.288, Faculte de Medecine Pitie-Salpetriere, Paris, France.
SOURCE: NEUROSCIENCE, (1991) 41 (2-3) 495-505.
Journal code: 7605074. ISSN: 0306-4522.
PUB. COUNTRY: ENGLAND: United Kingdom
DOCUMENT TYPE: Journal; Article; (JOURNAL ARTICLE)
LANGUAGE: English
FILE SEGMENT: Priority Journals
ENTRY MONTH: 199109
ENTRY DATE: Entered STN: 19911006
Last Updated on STN: 19970203
Entered Medline: 19910913

AB Extracellular recordings were made from serotonergic neurons of the rat dorsal raphe nucleus in a slice preparation. In the presence of phenylephrine (3 microM) to restore the pacemaker activity of otherwise silent serotonergic neurons, superfusion with the 5-hydroxytryptamine1A agonist ipsapirone depressed the firing of these neurons with an IC50 of approximately 50 nM. Complete inhibition was achieved with 100-300 nM of the drug. Concomitant superfusion with the 5-hydroxytryptamine1A antagonists spiperone (100 nM) or propranolol (10 microM) markedly reduced the inhibitory effect of ipsapirone (100 nM). Superfusion with K+ channel blockers such as apamin (50-100 nM), charybdotoxin (100 nM) or Ba2+ (1 mM) did not induce any changes in the electrical activity of serotonergic neurons. However, 4-aminopyridine (0.1-1 mM) disrupted the regularity of their discharge without affecting the mean firing rate. The ipsapirone-induced inhibition was unchanged by apamin and charybdotoxin, but was markedly reduced by Ba2+ and 4-aminopyridine. Thus the IC50 of ipsapirone was shifted to approximately 150 nM in the presence of 1 mM of 4-aminopyridine. These results indicate that, in serotonergic neurons within the dorsal raphe nucleus, the K+ channel opened through the stimulation of 5-hydroxytryptamine1A autoreceptors is 4-aminopyridine-sensitive.

L59 ANSWER 8 OF 25 CAPLUS COPYRIGHT 2003 ACS on STN DUPLICATE 1
ACCESSION NUMBER: 2002:927389 CAPLUS
DOCUMENT NUMBER: 138:4407
TITLE: Preparation of cinnamide derivatives as KCNQ **potassium channel** modulators
INVENTOR(S): Wu, Yong-Jin; Sun, Li-Qiang; Chen, Jie; He, Huan; L'Heureux, Alexandre; Dextraze, Pierre; Daris, Jean-Paul; Kinney, Gene G.; Dworetzky, Steven I.; Hewawasam, Piyasena
PATENT ASSIGNEE(S): Bristol-Myers Squibb Company, USA
SOURCE: PCT Int. Appl., 180 pp.

Searched by Barb O'Bryen, STIC 308-4291

CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2002096858	A1	20021205	WO 2002-US17049	20020531

W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, OM, PH, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TN, TR, TT, TZ, UA, UG, UZ, VN, YU, ZA, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM
RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG

PRIORITY APPLN. INFO.: US 2001-294815P P 20010531
OTHER SOURCE(S): MARPAT 138:4407

AB Title compds. I [wherein R = alkyl or CF3; R1 = pyridinyl, quinolinyl, thienyl, furanyl, 1,4-benzodioxanyl, 1,3-benzodioxolyl, chromanyl, indanyl, biphenylyl, and (un)substituted Ph; R2 and R3 independently equal H, alkyl, or halo; R4 = dialkylamino, CF3O, (un)substituted-morpholin-4-yl, -pyridinyl, -pyrimidinyl, -piperazinyl, and -pyrazinyl; R5 = H, Cl, or F; or R4 and R5 taken together form aryl, heterocyclic or carbocylic ring; R6, R7, and R8 = H, Cl, and F] are prepd. and disclosed as openers of the KCNQ potassium channel. Thus, II was prepd. via amidation of cinnamic acid with (S)-1-(2-naphthyl)ethylamine. Compds. of the invention were evaluated at a single concn. and at a single holding potential (-40.mu.M); the effect of the selected compds. on **KCNQ2** current were expressed as the percent of control current, e.g., II measured at 160 percent of control current at 5.mu.M concn. I are useful in the treatment of disorders which are responsive to the opening of the **KCNQ** potassium channels, e.g., migraine, convulsions, anxiety, etc..

REFERENCE COUNT: 5 THERE ARE 5 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L59 ANSWER 9 OF 25 CAPLUS COPYRIGHT 2003 ACS on STN DUPLICATE 2
ACCESSION NUMBER: 2002:10276 CAPLUS
DOCUMENT NUMBER: 136:79786
TITLE: Use of 3-substituted oxindole derivatives as **KCNQ potassium channel** modulators for treatment of pain
INVENTOR(S): Jensen, Bo Skaaning; Schroder, Rikke L.; Strobaek, Dorte; Olesen, Soren Peter
PATENT ASSIGNEE(S): Neurosearch A/S, Den.
SOURCE: PCT Int. Appl., 32 pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2002000217	A1	20020103	WO 2001-DK412	20010614

W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CR, CU, CZ, DE, DK, DM, DZ, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM

RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG

EP 1303269 A1 20030423 EP 2001-940246 20010614

R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR

PRIORITY APPLN. INFO.: DK 2000-1022 A 20000629
DK 2001-394 A 20010308
WO 2001-DK412 W 20010614

OTHER SOURCE(S): MARPAT 136:79786

AB The present invention relates to the use of substituted 3-Ph oxindole derivs. having general formula I (R = H, halo, OH; R1, R2, R3, and R4 = H, halo, alkyl, trihalogenmethyl, Ph, p-MePh, p-trihalognemethylphenyl, or form benzo fused ring; R5 = H, alkyl; and R6 = halo or trihalogenmethyl), as modulators of the potassium **KCNQ** channels, to pharmaceutical compns. comprising these compds., and to methods of treatment herewith.

REFERENCE COUNT: 7 THERE ARE 7 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L59 ANSWER 10 OF 25 CAPLUS COPYRIGHT 2003 ACS on STN DUPLICATE 3

ACCESSION NUMBER: 2001:886512 CAPLUS

DOCUMENT NUMBER: 136:32697

TITLE: Human **KCNQ5 potassium channel**, methods and compositions thereof

INVENTOR(S): Dworetzky, Steven I.; Ramanathan, Chandra S.; Trojnacki, Joanne T.; Boissard, Christopher G.; Gribkoff, Valentin K.

PATENT ASSIGNEE(S): Bristol-Myers Squibb Company, USA

SOURCE: PCT Int. Appl., 128 pp.
CODEN: PIXXD2

DOCUMENT TYPE: Patent

LANGUAGE: English

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2001092526	A1	20011206	WO 2001-US17314	20010524
W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, UZ, VN, YU, ZA, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM				
RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG				
US 2002040000	A1	20020404	US 2001-866020	20010524
EP 1290167	A1	20030312	EP 2001-937787	20010524
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR				

PRIORITY APPLN. INFO.: US 2000-207389P P 20000526
WO 2001-US17314 W 20010524

AB An isolated polynucleotide encoding a novel potassium channel polypeptide, **KCNQ5**, that is expressed primarily in brain and skeletal muscle is described. The new polypeptide has been cloned and isolated from a human brain cDNA library and is a member the **KCNQ** family of potassium channels. The provided human **KCNQ5** nucleic acid sequence and encoded polypeptide can be employed for diagnostic, screening and therapeutic uses. Moreover, the hKCNQ5 polypeptide can be used to assay for **KCNQ5** potassium channel modulators, which can be utilized in the treatment of neurol., neurophysiol., neuropsychol. and neuroaffective diseases, conditions and disorders, including, but not limited to, acute

and chronic pain, migraine, acute stroke, dementia, vascular dementia, trauma, epilepsy, amyelotrophic lateral sclerosis (ALS), multiple sclerosis (MS), Parkinson's Disease, learning and cognitive disorders, and neurophysiol. disorders including anxiety disorders, depression, bipolar disorders, sleep disorders, addiction, and eating disorders.
REFERENCE COUNT: 6 THERE ARE 6 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L59 ANSWER 11 OF 25 CAPLUS COPYRIGHT 2003 ACS on STN DUPLICATE 4
ACCESSION NUMBER: 2001:114933 CAPLUS
DOCUMENT NUMBER: 134:157578
TITLE: Methods using a **KCNQ potassium channel** modulator for treating or preventing pain or anxiety
INVENTOR(S): Wickenden, Alan David; Rigdon, Gregory Cooksey; McNaughton-Smith, Grant Andrew; Gross, Michael Francis
PATENT ASSIGNEE(S): Icagen, Inc., USA
SOURCE: PCT Int. Appl., 62 pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 3
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2001010381	A2	20010215	WO 2000-US21309	20000804
WO 2001010381	A3	20010816		
W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CR, CU, CZ, DE, DK, DM, DZ, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM				
RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG				
AU 2000067586	A5	20010305	AU 2000-67586	20000804
US 6326385	B1	20011204	US 2000-631747	20000804
EP 1200086	A2	20020502	EP 2000-955368	20000804
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL				
JP 2003506388	T2	20030218	JP 2001-514906	20000804
BR 2000012934	A	20030729	BR 2000-12934	20000804
US 2002013349	A1	20020131	US 2001-939230	20010824

PRIORITY APPLN. INFO.:
US 1999-147221P P 19990804
US 1999-158712P P 19991008
US 1999-165847P P 19991116
US 2000-631747 A 20000804
US 2000-632576 A 20000804
WO 2000-US21309 W 20000804

OTHER SOURCE(S): MARPAT 134:157578
AB A novel method is provided for treating of pain or anxiety, using compds. (e.g. N-arylbenzamides) that modulate **KCNQ** potassium channels and currents.

L59 ANSWER 12 OF 25 CAPLUS COPYRIGHT 2003 ACS on STN DUPLICATE 5
ACCESSION NUMBER: 2001:31314 CAPLUS
DOCUMENT NUMBER: 134:80838
TITLE: New uses of retigabine and other **potassium channel** openers
INVENTOR(S): Burbidge, Stephen Anthony; Clare, Jeffrey John; Cox, Brian; Dupere, Joseph; Hagan, Russell Michael; Xie,

Xinmin
PATENT ASSIGNEE(S): Glaxo Group Limited, UK
SOURCE: PCT Int. Appl., 14 pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2001001970	A2	20010111	WO 2000-GB2516	20000630
WO 2001001970	A3	20020228		

W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CR, CU, CZ, DE, DK, DM, DZ, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM

RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG

EP 1207863	A2	20020529	EP 2000-940669	20000630

R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL

JP 2003503447	T2	20030128	JP 2001-507464	20000630

PRIORITY APPLN. INFO.: GB 1999-15414 A 19990701
WO 2000-GB2516 W 20000630

AB The present invention relates to therapeutic uses of **KCNQ2**/3 potassium channel openers, including retigabine, for treatment of various diseases, esp. epilepsy, in a mammal, including man. Besides being used as antiepileptics, **KCNQ2**/3 potassium channel openers may be used as muscle relaxants, fever reducers, anxiolytics, antimigraine agents, and analgesics, for treatment of bipolar disorders, unipolar depression, functional bowel disorders, or tinnitis, for preventing and reducing drug dependence or tolerance, for treatment of cancer, inflammation, ophthalmic diseases, and various CNS disorders. **KCNQ2**/3 potassium channel openers may be formulated in various dosage forms alone or in combination with one or more other therapeutic agents.

L59 ANSWER 13 OF 25 CAPLUS COPYRIGHT 2003 ACS on STN DUPLICATE 7
ACCESSION NUMBER: 2000:900671 CAPLUS
DOCUMENT NUMBER: 134:67174
TITLE: Cloning and cDNA sequence of a novel **potassium channel KCNQ5** and therapeutic uses
INVENTOR(S): Jentsch, Thomas J.
PATENT ASSIGNEE(S): Neurosearch A/S, Den.
SOURCE: PCT Int. Appl., 50 pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2000077035	A2	20001221	WO 2000-DK289	20000529
WO 2000077035	A3	20010510		

W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CR, CU, CZ, DE, DK, DM, DZ, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, UZ, VN, YU, ZA,

ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM
RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG
EP 1194447 A2 20020410 EP 2000-931037 20000529
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO
PRIORITY APPLN. INFO.: DK 1999-828 A 19990611
WO 2000-DK289 W 20000529

AB This invention relates to novel potassium channels and genes encoding these channels. More specifically the invention provides isolated cDNA encoding the **KCNQ5** potassium channel subunit, cells transformed with these cDNA, transgenic animals comprising genetic mutations, and the use of the transformed cells and the transgenic animals for the in vitro and in vivo screening of chem. compds. affecting **KCNQ5** subunit contg. potassium channels. The cDNA encodes a polypeptide of 897 amino acids with a predicted mass of 99 kDa, comprising six transmembrane domains, a P-loop, and a carboxy-terminal conserved cytoplasmic region (the A-domain) with homol. to **KCNQ** potassium channels. Northern anal. of **KCNQ5** expression in human tissues revealed a band in brain.

L59 ANSWER 14 OF 25 CAPLUS COPYRIGHT 2003 ACS on STN DUPLICATE 8
ACCESSION NUMBER: 2000:535178 CAPLUS
DOCUMENT NUMBER: 133:145918
TITLE: Protein and DNA sequences of a novel **potassium channel** protein **KCNQ4** and the uses thereof in drug screening
INVENTOR(S): Jentsch, Thomas J.
PATENT ASSIGNEE(S): Neurosearch A/S, Den.
SOURCE: PCT Int. Appl., 65 pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2000044786	A1	20000803	WO 2000-DK24	20000119
W: AE, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CR, CU, CZ, DE, DK, DM, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, UZ, VN, YU, ZA, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM				
RW: GH, GM, KE, LS, MW, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG				
EP 1147134	A1	20011024	EP 2000-901048	20000119
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO				
JP 2002541769	T2	20021210	JP 2000-596042	20000119

PRIORITY APPLN. INFO.: DK 1999-76 A 19990126
DK 1999-693 A 19990519
WO 2000-DK24 W 20000119

AB This invention provides protein and DNA sequences for a novel member of the **KCNQ** family of potassium channel protein, designated **KCNQ4**, which relates to the deafness in a DFNA2 pedigree. **KCNQ4** is the first potassium channel gene underlying non-syndromic deafness, which forms heteromeric channels with other **KCNQ** channel subunits, in particular **KCNQ3**. Also disclosed are methods for utilizing **KCNQ4** in drug screening assays and in

therapy directed against diseases assocd. with inappropriate **KCNQ4** activity or levels.

REFERENCE COUNT: 7 THERE ARE 7 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L59 ANSWER 15 OF 25 CAPLUS COPYRIGHT 2003 ACS on STN
ACCESSION NUMBER: 2003:76913 CAPLUS
DOCUMENT NUMBER: 138:132228
TITLE: Mutations in human ion channels associated with epilepsy and other disorders and their diagnostic and therapeutic uses
INVENTOR(S): Mulley, John Charles; Harkin, Louise Anne; Dibbens, Leanne Michelle; Phillips, Hilary Anne; Heron, Sarah Elizabeth; Berkovic, Samuel Frank; Scheffer, Ingrid Eileen
PATENT ASSIGNEE(S): Bionomics Limited, Australia; Wallace, Robyn
SOURCE: PCT Int. Appl., 106 pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2003008574	A1	20030130	WO 2002-AU910	20020708

W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, OM, PH, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM
RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG

PRIORITY APPLN. INFO.: AU 2001-6452 A 20010718
AU 2002-910 A 20020305
AU 2002-2292 A 20020513

AB A method of identifying a subject predisposed to a disorder assocd. with ion channel dysfunction comprises ascertaining whether at least one of the genes encoding ion channel subunits in said subject has undergone a mutation event. The invention is based on a new genetic model postulating that idiopathic generalized epilepsies (IGEs) and generalized epilepsy with febrile seizures plus (GEFS+) are due to the combination of two mutations in multi-subunit ion channels. A no. of novel mutations or variants are identified in genes encoding subunits of ion channels in individuals with epilepsy using SSCP anal. and sequencing. Specific mutations included R396C, R369Q, and P474R in the CHRNA4 subunit and T26M, L301V, V308A, and G412D in the CHRNB2 subunit of human nicotinic acetylcholine receptor.

REFERENCE COUNT: 7 THERE ARE 7 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L59 ANSWER 16 OF 25 CAPLUS COPYRIGHT 2003 ACS on STN
ACCESSION NUMBER: 2002:736153 CAPLUS
DOCUMENT NUMBER: 137:247690
TITLE: Preparation of bisarylamines as **potassium channel** openers
INVENTOR(S): McNaughton-Smith, Grant A.; Amato, George S.
PATENT ASSIGNEE(S): Icagen, Inc., USA
SOURCE: PCT Int. Appl., 73 pp.

Searched by Barb O'Bryen, STIC 308-4291

CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2002074388	A1	20020926	WO 2002-US7744	20020315

W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, OM, PH, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM

RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG

US 2002193597	A1	20021219	US 2002-95617	20020311
US 6593349	B2	20030715		

PRIORITY APPLN. INFO.: US 2001-277329P P 20010319
US 2002-95617 A 20020311

OTHER SOURCE(S): MARPAT 137:247690

AB The title compds. [I; ring A = (un)substituted aryl, 5-6 membered heteroaryl; ring C = II-III (wherein Z = NR0, S, O; D = N, CR1; Y = halo, R2, OR2; R0-R2 = H, alkyl); X = NR3, O, S; R3 = H, SO2R4, alkyl, cycloalkyl; R4 = alkyl, cycloalkyl], useful in the treatment of diseases through the modulation of potassium ion flux through voltage-dependent potassium channels, were prepd. Thus, reacting benzoxazole IV with phenethylamine in DMSO afforded 57% V. Representative compds. I showed EC50 values from about 5 nM to about 10 .mu.M in KCNQ potassium channel screening assay. More particularly, the invention provides bisarylamines, compns. and methods that are useful in the treatment of central or peripheral nervous system disorders (e.g., migraine, ataxia, Parkinson's disease, bipolar disorders, trigeminal neuralgia, spasticity, mood disorders, brain tumors, psychotic disorders, myokymia, seizures, epilepsy, hearing and vision loss, Alzheimer's disease, age-related memory loss, learning deficiencies, anxiety and motor neuron diseases) and as neuroprotective agents (e.g., to prevent stroke and the like) by opening potassium channels assocd. with the onset or recurrence of the indicated conditions.

REFERENCE COUNT: 1 THERE ARE 1 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L59 ANSWER 17 OF 25 CAPLUS COPYRIGHT 2003 ACS on STN
ACCESSION NUMBER: 2002:637801 CAPLUS
DOCUMENT NUMBER: 137:180780
TITLE: Collections of transgenic animal lines in which a subset of cells characterized by expression of an endogenous "characterizing" gene and uses
INVENTOR(S): Serafini, Tito Andrew
PATENT ASSIGNEE(S): Renovis, Inc., USA
SOURCE: PCT Int. Appl., 170 pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 2
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2002064749	A2	20020822	WO 2002-US4765	20020214

WO 2002064749 A3 20030320
W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, OM, PH, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM
RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG
US 2003051266 A1 20030313 US 2001-783487 20010214
PRIORITY APPLN. INFO.: US 2001-783487 A 20010214

AB The invention provides lines of transgenic animals, preferably mice, in which a subset of cells characterized by expression of a particular endogenous gene (a "characterizing gene") expresses, either constitutively or conditionally, a "system gene," which preferably encodes a detectable or selectable marker or a protein product that induces or suppresses the expression of a detectable or selectable marker (e.g., the protein product is a transcription factor and the expression of the detectable or selectable marker, or suppression thereof is dependent upon the transcription factor, for example, the nucleotide sequence encoding the detectable or selectable marker is operatively linked to a regulatory element recognized by the system gene product) allowing detection, isolation and/or selection of the subset of cells from the other cells of the transgenic animal, or explanted tissue thereof. In a preferred embodiment, the transgene introduced into the transgenic animal includes at least the coding region sequences for the system gene product operably linked to all or a portion of the regulatory sequences from the characterizing gene such that the system gene has the same pattern of expression within the animal (i.e., is expressed substantially in the same population of cells) or within the anatomical region contg. the cells to be analyzed as the characterizing gene. The invention provides collections of such lines of transgenic animals and vectors for producing them, and also provides methods for the detection, isolation and/or selection of a subset of cells expressing the marker gene in such transgenic animal lines. The vector (preferably a BAC) comprising the system gene coding sequences and characterizing gene sequences is then introduced into the genome of a potential founder animal to generate a line of transgenic animals. Also, preferably, the transgene contg. the system gene coding sequences and characterizing gene sequences is present in the genome at a site other than where the endogenous characterizing gene is located. Such transgenic animals can then be used to detect, isolate and/or select pure populations of cells having a particular functional characteristic, preferably cells of the nervous system. Creation of transgenic mouse line expressing a 5HT2A receptor BAC was demonstrated. The isolated cells have uses in gene discovery, target identification and validation, genomic and proteomics anal., etc.

L59 ANSWER 18 OF 25 EMBASE COPYRIGHT 2003 ELSEVIER SCI. B.V. on STN
ACCESSION NUMBER: 2002440167 EMBASE
TITLE: Pharmacologic management of urinary incontinence in women.
AUTHOR: Wein A.J.; Rovner E.S.
CORPORATE SOURCE: Dr. A.J. Wein, Division of Urology, Hosp. of the Univ. of Pennsylvania, 3400 Spruce Street, Philadelphia, PA 19104, United States. larmerr@uphs.upenn.edu
SOURCE: Urologic Clinics of North America, (2002) 29/3 (537-550). Refs: 87
ISSN: 0094-0143 CODEN: UCNADW
PUBLISHER IDENT.: S 0094-0143(02)00053-8
COUNTRY: United States
DOCUMENT TYPE: Journal; General Review
FILE SEGMENT: 010 Obstetrics and Gynecology

028 Urology and Nephrology
037 Drug Literature Index
038 Adverse Reactions Titles
LANGUAGE: English
SUMMARY LANGUAGE: English
AB Although some clinicians have reported spectacular cure and improvement rates with .alpha.-adrenergic agonists and agents that produce an .alpha.-adrenergic effect in the outlet of patients with sphincteric urinary incontinence, our experience coincides with those who report that such treatment with such agents often produces satisfactory or some improvement in mild cases but rarely produces total dryness in cases of severe or even moderate stress incontinence. Such therapy should always be used in conjunction with pelvic floor physiotherapy/biofeedback to achieve optimal results.

L59 ANSWER 19 OF 25 EMBASE COPYRIGHT 2003 ELSEVIER SCI. B.V. on STN
ACCESSION NUMBER: 2002317817 EMBASE
TITLE: Erectile dysfunction: Oral pharmacotherapy options.
AUTHOR: Vitezic D.; Pelcic J.M.
CORPORATE SOURCE: Dr. D. Vitezic, Clinical Pharmacology Unit, University Hospital Center Rijeka, Department of Pharmacology, Brace Branchetta 20, HR-51000 Rijeka, Croatia. Dinko.Vitezic@mamed.medri.hr
SOURCE: International Journal of Clinical Pharmacology and Therapeutics, (2002) 40/9 (393-403).
Refs: 72
ISSN: 0946-1965 CODEN: ICTHEK
COUNTRY: Germany
DOCUMENT TYPE: Journal; General Review
FILE SEGMENT: 028 Urology and Nephrology
030 Pharmacology
037 Drug Literature Index
038 Adverse Reactions Titles
LANGUAGE: English
SUMMARY LANGUAGE: English
AB Erectile dysfunction (ED) (impotence) is a widespread, age-related problem, which affects 52% of men between 40 and 70 years of age. It is classified as psychogenic, organic, or mixed psychogenic and organic. ED is not a problem only of men, because the relationship between partners can also be disturbed. Therefore, adequate treatment of ED is needed and the most convenient and simplest way is oral drug therapy. Sildenafil, phosphodiesterase-(PDE)-5-selective inhibitor has been the drug of choice for patients with ED since it has been launched in March 1998. The results of various studies have confirmed the efficacy of the drug in men with ED of various etiologies, as well as the positive effect of sildenafil on the quality of a partnership. The most frequent adverse effects documented with sildenafil usage are headache, flushes, dyspepsia, visual disturbances and nasal congestion/rhinitis. These adverse effects are dose-related, usually transient and mild, with low withdrawal rate. Several studies performed recently have shown that sildenafil is a safe and effective treatment of ED in patients with cardiovascular disease, who do not take nitrates or nitrate donors concomitantly. Other oral medications for ED include apomorphine, phentolamin, yohimbine, trazodone, testosterone and new PDE-5 inhibitors in Phase III clinical trials, such as vardenafil and tadalafil. It is obvious, according to recent data, that the concept of PDE-5 inhibition has a central position in oral pharmacotherapy of ED. However, larger clinical studies of efficacy and safety should be carried out using most of the other above-mentioned oral agents and these may also gain a place in the therapy of ED. There are no studies directly comparing sildenafil and other treatments of ED or assessing its role in combination with other therapies. According to the present knowledge, the quality of life, not only of patients but also of their sexual partners, will be improved significantly with sildenafil

usage and this is an important precondition for overall health of both. Sildenafil is thus a highly effective peroral treatment for ED in patients without contraindications for its use, which can be considered as the first-line therapy with an acceptable risk-benefit ratio.

L59 ANSWER 20 OF 25 EMBASE COPYRIGHT 2003 ELSEVIER SCI. B.V. on STN
ACCESSION NUMBER: 2002081195 EMBASE
TITLE: Evaluation and treatment of erectile dysfunction in men with diabetes mellitus.
AUTHOR: Dey J.; Shepherd M.D.
CORPORATE SOURCE: Dr. J. Dey, Endocrinology Consultants PLLC, 670 Crossover Rd, Tupelo, MS 38803, United States. jayantdey@hotmail.com
SOURCE: Mayo Clinic Proceedings, (2002) 77/3 (276-282).
Refs: 43
ISSN: 0025-6196 CODEN: MACPAJ
COUNTRY: United States
DOCUMENT TYPE: Journal; General Review
FILE SEGMENT: 003 Endocrinology
028 Urology and Nephrology
037 Drug Literature Index
038 Adverse Reactions Titles
LANGUAGE: English
SUMMARY LANGUAGE: English
AB Diabetic men have a more than 3-fold increased prevalence of erectile dysfunction (ED) compared with nondiabetic men. Erectile function is primarily a vascular phenomenon, triggered by neurologic controls and facilitated by appropriate hormonal and psychological components. Recent advances in the understanding of the physiology of penile vasculature and its role in male sexual performance have influenced the clinical approach to ED. The pathophysiological alterations leading to impotence in diabetic men include vasculogenic, neurogenic, and hormonal etiologies. A clinical work-up, including a thorough history and physical examination, is an important aspect of ED management. Biochemical evaluations to rule out secondary causes like hypogonadism and thyroid abnormalities are suggested. Oral medications acting through phosphodiesterase inhibition in penile vasculature have revolutionized treatment of impotence in diabetic men. Because of a high success rate in treating ED of various etiologies, these agents are the treatment of choice for most patients. Safety and efficacy of vacuum-constriction devices, intraurethral suppositories, intracavernosal injections, and other therapies are discussed. A clinical algorithm for the evaluation and management of ED is provided for use in the primary care setting.

L59 ANSWER 21 OF 25 EMBASE COPYRIGHT 2003 ELSEVIER SCI. B.V. on STN
ACCESSION NUMBER: 1999094554 EMBASE
TITLE: Tegaserod Maleate. 5-HT4 agonist, prokinetic, treatment of irritable bowel syndrome.
AUTHOR: Graul A.; Silvestre J.; Castaner J.
CORPORATE SOURCE: A. Graul, Prous Science, P.O. Box 540, 08080 Barcelona, Spain
SOURCE: Drugs of the Future, (1999) 24/1 (38-44).
Refs: 31
ISSN: 0377-8282 CODEN: DRFUD4
COUNTRY: Spain
DOCUMENT TYPE: Journal; Article
FILE SEGMENT: 030 Pharmacology
037 Drug Literature Index
038 Adverse Reactions Titles
048 Gastroenterology
LANGUAGE: English

L59 ANSWER 22 OF 25 EMBASE COPYRIGHT 2003 ELSEVIER SCI. B.V. on STN
ACCESSION NUMBER: 1998358331 EMBASE

TITLE: Age and sex distribution of suspected adverse drug reactions to newly marketed drugs in general practice in England: Analysis of 48 cohort studies.
AUTHOR: Martin R.M.; Biswas P.N.; Freemantle S.N.; Pearce G.L.; Mann R.D.
CORPORATE SOURCE: Dr. R.M. Martin, Drug Safety Research Unit, Bursledon Hall, Blundell Lane, Southampton SO31 1AA, United Kingdom
SOURCE: British Journal of Clinical Pharmacology, (1998) 46/5 (505-511).
Refs: 18
ISSN: 0306-5251 CODEN: BCPHBM
COUNTRY: United Kingdom
DOCUMENT TYPE: Journal; Article
FILE SEGMENT: 017 Public Health, Social Medicine and Epidemiology
030 Pharmacology
036 Health Policy, Economics and Management
037 Drug Literature Index
038 Adverse Reactions Titles
LANGUAGE: English
SUMMARY LANGUAGE: English

AB Aims. Little is known about the frequency with which suspected adverse drug reactions are seen by general practitioners after the prescription of newly marketed drugs. We investigated age and sex specific incidence rates of suspected adverse drug reactions recorded by general practitioners in England after the prescription of selected newly marketed drugs. Methods. Information was collected from 48 national cohort studies of newly marketed drugs studied by prescription-event monitoring. Questionnaires were sent to prescribers asking for details of events and suspected adverse drug reactions recorded in the patients' notes occurring after the drugs were prescribed. Results. During the 48 cohort studies, a total of 513,608 patients were investigated, of which 221,781 (43.2%) were males and 285,862 (55.7%) were females. The overall incidence of suspected adverse drug reactions in males was 12.9 per 10,000 patient-months of exposure (95% confidence limits 12.3 to 13.5), and in females was 20.6 per 10,000 patient-months of exposure (95% confidence limits 19.9 to 21.3). The overall age-standardised relative risk of an adverse drug reaction in females compared with males was 1.6 (1.5-1.7). This sex difference was significant in all age groups above 19 years of age, and was relatively consistent across all age groups (AHp2 test for heterogeneity 9.2, P = 0.3). The highest rate of recording in males was in the 50-59 year age group, and in females was in the 30-39 year age group. Conclusions. In general practice in England, suspected adverse drug reactions to newly marketed drugs are recorded more often in adults aged between 30 and 59 years of age and are 60% more common in women than in men. The sex difference occurs in all age groups over 19 years of age.

L59 ANSWER 23 OF 25 EMBASE COPYRIGHT 2003 ELSEVIER SCI. B.V. on STN
ACCESSION NUMBER: 93328548 EMBASE
DOCUMENT NUMBER: 1993328548
TITLE: Renin angiotensin system agents.
AUTHOR: Jacques C.
SOURCE: Current Opinion in Therapeutic Patents, (1993) 3/10 (1578-1580).
ISSN: 0962-2594 CODEN: COTPES
COUNTRY: United Kingdom
DOCUMENT TYPE: Journal; Note
FILE SEGMENT: 008 Neurology and Neurosurgery
012 Ophthalmology
018 Cardiovascular Diseases and Cardiovascular Surgery
028 Urology and Nephrology
030 Pharmacology
032 Psychiatry
037 Drug Literature Index

LANGUAGE: English

L59 ANSWER 24 OF 25 WPIDS COPYRIGHT 2003 THOMSON DERWENT on STN
ACCESSION NUMBER: 2002-154599 [20] WPIDS
DOC. NO. CPI: C2002-048288
TITLE: Novel binding site of NS3 NS4A complex characterized by binding of a specific sequence, useful for the discovery of inhibitors of hepatitis C protease and the treatment of hepatitis C disease.
DERWENT CLASS: B04 D16
INVENTOR(S): HIXON, M S; KETTNER, C A
PATENT ASSIGNEE(S): (DUPO) DU PONT PHARM CO; (HIXO-I) HIXON M S; (KETT-I) KETTNER C A; (DUPO) DUPONT PHARM CO
COUNTRY COUNT: 94
PATENT INFORMATION:

PATENT NO	KIND	DATE	WEEK	LA	PG
WO 2001096540	A2	20011220	(200220)*	EN	45
RW: AT BE CH CY DE DK EA ES FI FR GB GH GM GR IE IT KE LS LU MC MW MZ NL OA PT SD SE SL SZ TR TZ UG ZW					
W: AE AG AL AM AT AU AZ BA BB BG BR BY BZ CA CH CN CR CU CZ DE DK DM DZ EE ES FI GB GD GE GH GM HR HU ID IL IN IS JP KE KG KP KR KZ LC LK LR LS LT LU LV MA MD MG MK MN MW MX MZ NO NZ PL PT RO RU SD SE SG SI SK SL TJ TM TR TT TZ UA UG UZ VN YU ZA ZW					
AU 2001068303	A	20011224	(200227)		
US 2002102533	A1	20020801	(200253)		

APPLICATION DETAILS:

PATENT NO	KIND	APPLICATION	DATE
WO 2001096540	A2	WO 2001-US18751	20010608
AU 2001068303	A	AU 2001-68303	20010608
US 2002102533	A1 Provisional	US 2000-210900P	20000611
		US 2001-878579	20010611

FILING DETAILS:

PATENT NO	KIND	PATENT NO
AU 2001068303	A Based on	WO 2001096540

PRIORITY APPLN. INFO: US 2000-210900P 20000611; US 2001-878579 20010611

AB WO 200196540 A UPAB: 20020402
NOVELTY - A binding site (I) of hepatitis C protease (NS3):NS4A complex characterized by binding of a sequence (S), where binding is inhibitory when measured by enzymatic hydrolysis of a peptide substrate encompassing P6-P7' binding sites, and non-inhibitory when measured by enzymatic hydrolysis of a peptide substrate encompassing P6-P2' binding sites but does not extend into P4'-P7' binding sites region.

DETAILED DESCRIPTION - A binding site (I) of hepatitis C protease (NS3):NS4A complex characterized by binding of a sequence (S), where binding is inhibitory when measured by enzymatic hydrolysis of a peptide substrate encompassing P6-P7' binding sites, and non-inhibitory when measured by enzymatic hydrolysis of a peptide substrate encompassing P6-P2' binding sites but does not extend into P4'-P7' binding sites region, is new.

In (I), (S) is Ac-DE-Dpa (L- beta , beta -diphenylalanine)-E-Cha (L-cyclohexylalanine)-C-OH (S).

INDEPENDENT CLAIMS are also included for the following:
(1) evaluating (M1) a compound for utility in inhibiting hepatitis C

protease involves contacting a compound with hepatitis C protease NS3 in the presence of NS4A and a peptide substrate, where the peptide substrate binds to the P6-P7' binding site, and the compound binds to the binding site of Q9692, and measuring the activity of enzyme hydrolysis;

(2) a pharmaceutical composition (II) comprising a compound (III) identified by (M1) or its salt or prodrug form, where (III) inhibits hepatitis C protease;

(3) a binding site (IV) of NS3 protease catalytic domain which comprises residues: S5, Q6, Q7, R9, G10, L11, C14, V33, S35, A37, T38, N39, S40, R107 and K134 of NS3A catalytic domain and V-G of NS4A (of the tetrad IVGR);

(4) evaluating (M2) an exosite inhibitor in which competitive inhibitions is observed for the hydrolysis of Ac-D-E-M-E-E-C-A-S-H-L-P-Y-E 5-(2'-aminoethyl-amino)-naphthalenesulfonic acid (EDANS)-NH2 and at comparable levels either no inhibition or noncompetitive inhibition are observed for substrates, Ac-D-E-D (EDANS) -E-E- L- alpha -aminobutyric acid (Abu) (COO)-A-S-K(DABCYL)-NH2 and Ac-D-E-E(EDANS)-E-E-Abu-A-S-K (4-(4-dimethylaminophenylazo)benzoyl (DABCYL)-NH2, respectively; and

(5) evaluating (M3) exosite inhibitor where a P1-P6 inhibitors such as Ac-D-E-Dpa-E-Cha-boroallylglycine (Alg)-C10H16, is allowed to bind to NS3 in the presence of NS4A, and binding in the exosite is measured by determining the increase in intrinsic fluorescence or by displacement of Q9692 or a structurally related analog.

ACTIVITY - Nootropic; neuroprotective; tranquilizer; anticonvulsant; virucide; hepatotropic; antiinflammatory.

MECHANISM OF ACTION - Inhibitor of hepatitis C protease.

No supporting biological data is given.

USE - (II) is useful for treating hepatitis C (claimed).

(I) is useful for the discovery of inhibitors of hepatitis C protease and the treatment of hepatitis C disease. (II) is useful for treating neurological disorders related to modulation of a **potassium channel**, more specifically the M-current, formed by expression of **KCNQ2** and **KCNQ3** genes, such as epilepsy, **anxiety**, insomnia or Alzheimer's disease.

Dwg.0/5

L59 ANSWER 25 OF 25 WPIDS COPYRIGHT 2003 THOMSON DERWENT on STN
ACCESSION NUMBER: 2002-129830 [17] WPIDS
CROSS REFERENCE: 2001-123337 [13]; 2001-211017 [21]
DOC. NO. CPI: C2002-039763
TITLE: New pyridine-substituted benzanilides useful for treating central or peripheral nervous system disorder e.g. Parkinson's disease.
DERWENT CLASS: B02 B03
INVENTOR(S): AMATO, G S; FRITCH, P C; MCNAUGHTON-SMITH, G
PATENT ASSIGNEE(S): (AMAT-I) AMATO G S; (FRIT-I) FRITCH P C; (MCNA-I) MCNAUGHTON-SMITH G; (ICAG-N) ICAGEN INC
COUNTRY COUNT: 100
PATENT INFORMATION:

PATENT NO	KIND	DATE	WEEK	LA	PG
US 2001049444	A1	20011206	(200217)*		37
WO 2002062295	A2	20020815	(200263)	EN	

RW: AT BE CH CY DE DK EA ES FI FR GB GH GM GR IE IT KE LS LU MC MW MZ NL OA PT SD SE SL SZ TR TZ UG ZM ZW

W: AE AG AL AM AT AU AZ BA BB BG BR BY BZ CA CH CN CO CR CU CZ DE DK DM DZ EC EE ES FI GB GD GE GH GM HR HU ID IL IN IS JP KE KG KP KR KZ LC LK LR LS LT LU LV MA MD MG MK MN MW MX MZ NO NZ OM PH PL PT RO RU SD SE SG SI SK SL TJ TM TN TR TT TZ UA UG US UZ VN YU ZA ZM ZW

APPLICATION DETAILS:

PATENT NO	KIND	APPLICATION	DATE
US 2001049444 A1	Provisional	US 1999-147221P	19990804
	CIP of	US 2000-632576	20000804
		US 2001-776791	20010202
WO 2002062295 A2		WO 2002-US3061	20020201

PRIORITY APPLN. INFO: US 1999-147221P 19990804; US 2000-632576 20000804; US 2001-776791 20010202

AB US2001049444 A UPAB: 20021001

NOVELTY - Pyridine-substituted benzanilides (I) are new.

DETAILED DESCRIPTION - Pyridine-substituted benzanilides of formula (I) are new.

Y = H, methyl, methoxy, trifluoromethoxy, -CF3 or halo;

V and X = lower alkyl, lower heteroalkyl (both optionally substituted), H, halo, NO2, CN, CF3, C(O)NR11R12 or C(O)R13;

R1, R11 - R13 = lower alkyl, lower heteroalkyl, carbocycle, heterocycle, (hetero)aryl (all optionally substituted);

R11+R12 = optionally a ring;

Q and W = -(CR2R3)t-(CH2)n-, -(CH2)n-(CR2R3)t, -C(R4)=C(R5)- or C equivalent to C-;

R2 and R3 = optionally substituted lower (hetero)alkyl, H or F;

R2+R3 = optionally joined to form a cyclic structure selected form cycloalkyl or heterocycle;

C(R2+R3) = -C(O)-;

Z = -O-, -S(O)m-, -N(R4)-, -N(R4)C(O)-, -C(O)N(R4)-, -C(O)-, -N(R4)C(O)N(R5)-, -N(R4)C(O)O-, (CR2R3)t, or -SO2N(R4)-;

R4 and R5 = lower alkyl, lower hetero alkyl, (hetero)aryl (all optionally substituted) or H;

R1+X and R1+R4 = optionally substituted heterocycle;

m and t = 0 - 2; and

n = 0 - 3.

ACTIVITY - Antimigraine; Antiparkinsonian; Relaxant; Anti-tumor; Auditory; Ophthalmological; Nootropic; Neuroprotective; Cerebroprotective; Analgesic; Anticonvulsant; Tranquilizer; Antiinflammatory; Antirheumatic; Antiarthritic; Osteopathic; Neuroleptic; Antidepressant.

MECHANISM OF ACTION - Voltage-dependent **potassium channel** modulator; **Potassium channel** openers.

3,4-Dichloro-N-pyridin-3-yl-benzamide was assayed for **KCNQ2** (voltage dependent **potassium channels**) protocol and was found to 30 - greater than 70% active.

USE - For treating central or peripheral nervous system disorders or condition through modulation of a voltage-dependent **potassium channel**, such as migraine, ataxia, Parkinson's disease, bipolar disorders, spasticity, mood disorders, brain tumors, psychotic disorders, myokymia, seizures, epilepsy, hearing loss, vision loss, Alzheimer's disease, age-related memory loss, learning deficiencies, motor neuron diseases, stroke, pain, **anxiety** (all claimed), gastroesophageal reflux disorder, gastrointestinal hypomotility disorders, inflammatory conditions, rheumatoid arthritis, rheumatoid spondylitis, osteoarthritis, gouty arthritis, non-articular inflammatory conditions (e.g. herniated, ruptured and prolapsed disc syndrome, bursitis, tendonitis, tenosynovitis, fibromyolgia syndrome and other conditions associated with ligamentous sprain and regional musculoskeletal strain), pain associated with abnormally raised skeletal muscle tone, **obsessive compulsive** disorders, post-traumatic **stress disorder**; Schizophrenia, **panic** disorder, simple **phobia**, multiple sclerosis, major depressive disorders, other physically in capacitating disorders and as agent for treating convulsive states.

ADVANTAGE - The compound increases ion flow through voltage-dependent

potassium channel comprising **KCNQ** subunits, responsible for the M-current, in a cell.
Dwg.0/1

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STRUCTURE FILE UPDATES:    2 SEP 2003  HIGHEST RN 577952-45-5
DICTIONARY FILE UPDATES:   2 SEP 2003  HIGHEST RN 577952-45-5

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PROPERTIES for more information.  See STNote 27, Searching Properties
in the CAS Registry File, for complete details:
http://www.cas.org/ONLINE/STN/STNOTES/stnotes27.pdf


L76             STR
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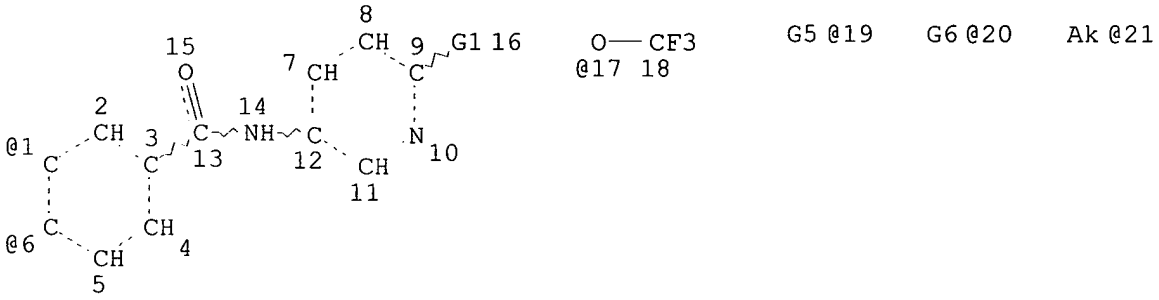


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VAR G6=X/21/22/NO2/CN/PH
VPA 19-1/6 U
VPA 20-1/6 U
NODE ATTRIBUTES:
CONNECT IS E1  RC AT  21
DEFAULT MLEVEL IS ATOM
DEFAULT ECLEVEL IS LIMITED

GRAPH ATTRIBUTES:
RING(S) ARE ISOLATED OR EMBEDDED
NUMBER OF NODES IS  23

STEREO ATTRIBUTES: NONE
L78           41 SEA FILE=REGISTRY SSS FUL L76

100.0% PROCESSED   4504 ITERATIONS                    41 ANSWERS
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FILE COVERS 1907 - 4 Sep 2003  VOL 139 ISS 10
FILE LAST UPDATED: 2 Sep 2003  (20030902/ED)

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  substance identification.


L76             STR
L78          41 SEA FILE=REGISTRY SSS FUL L76
L79           9 SEA FILE=CAPLUS ABB=ON  L78


FILE 'USPATFULL' ENTERED AT 12:09:43 ON 04 SEP 2003
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FILE COVERS 1971 TO PATENT PUBLICATION DATE: 2 Sep 2003 (20030902/PD)
FILE LAST UPDATED: 2 Sep 2003 (20030902/ED)
HIGHEST GRANTED PATENT NUMBER: US6615408
HIGHEST APPLICATION PUBLICATION NUMBER: US2003163860
CA INDEXING IS CURRENT THROUGH 2 Sep 2003 (20030902/UPCA)
ISSUE CLASS FIELDS (/INCL) CURRENT THROUGH: 2 Sep 2003 (20030902/PD)
REVISED CLASS FIELDS (/NCL) LAST RELOADED: Jun 2003
USPTO MANUAL OF CLASSIFICATIONS THESAURUS ISSUE DATE: Jun 2003

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>>>  publications, starting in 2001, for the inventions covered in     <<<
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>>>  published document but also a list of any subsequent              <<<
>>>  publications.  The publication number, patent kind code, and      <<<
>>>  publication date for all the US publications for an invention     <<<
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>>>  /PK, etc.                                                         <<<

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>>>  enter this cluster.                                               <<<
>>>                                                                    <<<
>>>  Use USPATALL when searching terms such as patent assignees,       <<<
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>>> classifications, or claims, that may potentially change from <<<
>>> the earliest to the latest publication. <<<

This file contains CAS Registry Numbers for easy and accurate substance identification.

L76 STR
L78 41 SEA FILE=REGISTRY SSS FUL L76
L80 11 SEA FILE=USPATFULL ABB=ON L78

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FILE 'USPATFULL' ENTERED AT 12:09:43 ON 04 SEP 2003
CA INDEXING COPYRIGHT (C) 2003 AMERICAN CHEMICAL SOCIETY (ACS)
PROCESSING COMPLETED FOR L79
PROCESSING COMPLETED FOR L80
L82 19 DUP REM L79 L80 (1 DUPLICATE REMOVED)
ANSWERS '1-9' FROM FILE CAPLUS
ANSWERS '10-19' FROM FILE USPATFULL

=> d ibib abs hitstr 1-19; fil cao; d que nos l81

L82 ANSWER 1 OF 19 CAPLUS COPYRIGHT 2003 ACS on STN DUPLICATE 1
ACCESSION NUMBER: 2001:886851 CAPLUS
DOCUMENT NUMBER: 136:20023
TITLE: Preparation of pyridine-substituted benzanilides as potassium channel openers
INVENTOR(S): McNaughton-Smith, Grant; Fritch, Paul Christopher; Amato, George Salvatore
PATENT ASSIGNEE(S): USA
SOURCE: U.S. Pat. Appl. Publ., 37 pp., Cont.-in-part of U.S. Ser. No. 632,576.
CODEN: USXXCO
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 3
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
US 2001049444	A1	20011206	US 2001-776791	20010202
US 6495550	B2	20021217		
US 6326385	B1	20011204	US 2000-631747	20000804
US 6372767	B1	20020416	US 2000-632576	20000804
US 2002013349	A1	20020131	US 2001-939230	20010824
US 2002052393	A1	20020502	US 2001-2800	20011102
US 6605725	B2	20030812		
US 2002091122	A1	20020711	US 2001-4122	20011206
WO 2002062295	A2	20020815	WO 2002-US3061	20020201
WO 2002062295	A3	20030703		

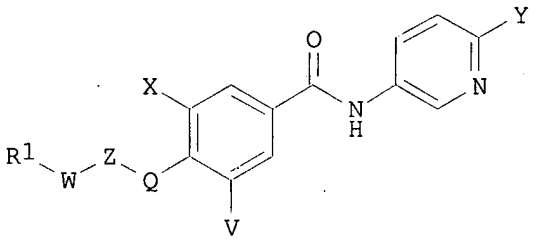
W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, OM, PH, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM

RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG

PRIORITY APPLN. INFO.:
US 1999-147221P P 19990804
US 2000-632576 A2 20000804
US 1999-158712P P 19991008
US 1999-165847P P 19991116
US 2000-631747 A 20000804
US 2001-776791 A 20010202

OTHER SOURCE(S): MARPAT 136:20023

GI

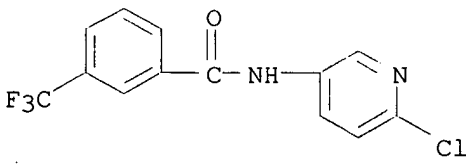


I

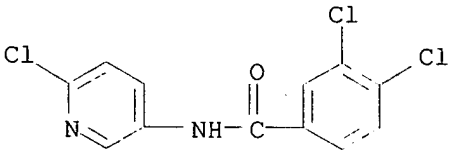
AB The title compds. [I; Y = H, Me, OMe, OCF3, halo; V, X = H, halo, alkyl, etc.; R1 = alkyl, heteroalkyl, aryl, etc.; Q, W = C.tplbond.C, (un)substituted CH:CH, alkylene; Z = O, CO, (un)substituted NH, etc.] which are voltage-dependent potassium channel openers, and are useful for the treatment of central and peripheral nervous system disorders, were prepd. General procedures for prepg. compds. I such as 3,4-dichloro-N-(pyridin-3-yl)benzamide were given. The activity of compds. I, assayed according to a KCNQ2 screening protocol, ranged from about 30% to greater than about 70% efflux.

IT **325457-87-2P 325457-88-3P 325457-89-4P**
325457-90-7P 325457-91-8P 325457-93-0P
325457-94-1P 325457-95-2P 325457-96-3P
325457-97-4P 325457-98-5P 325457-99-6P
325458-00-2P 325458-01-3P 325458-21-7P
325458-26-2P 325458-27-3P 325458-32-0P
RL: PAC (Pharmacological activity); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)
(prepn. of benzanilides as potassium channel openers)

RN 325457-87-2 CAPLUS
CN Benzamide, N-(6-chloro-3-pyridinyl)-3-(trifluoromethyl)- (9CI) (CA INDEX NAME)



RN 325457-88-3 CAPLUS
CN Benzamide, 3,4-dichloro-N-(6-chloro-3-pyridinyl)- (9CI) (CA INDEX NAME)



RN 325457-89-4 CAPLUS
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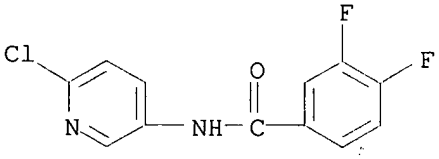

RN 325457-90-7 CAPLUS
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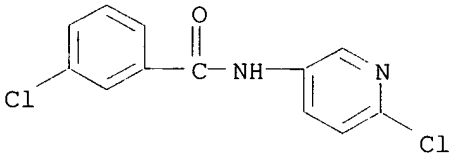
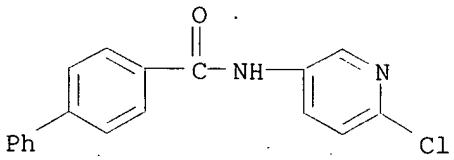
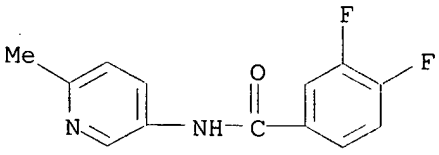


RN 325457-91-8 CAPLUS
CN [1,1'-Biphenyl]-4-carboxamide, N-(6-chloro-3-pyridinyl)- (9CI) (CA INDEX NAME)



RN 325457-93-0 CAPLUS
CN Benzamide, 3,4-difluoro-N-(6-methyl-3-pyridinyl)- (9CI) (CA INDEX NAME)



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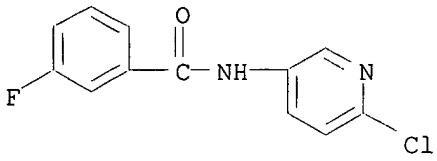

RN 325457-95-2 CAPLUS
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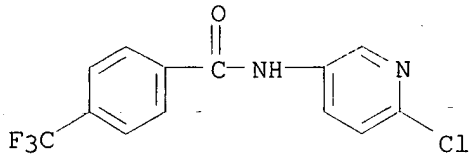

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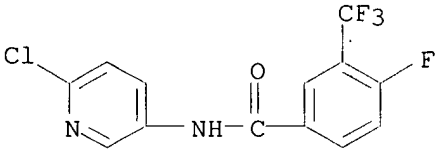

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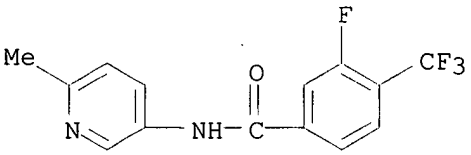
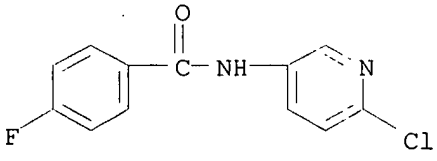
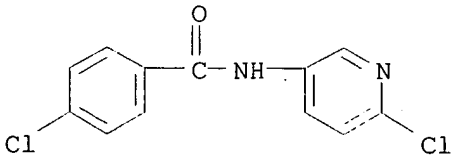


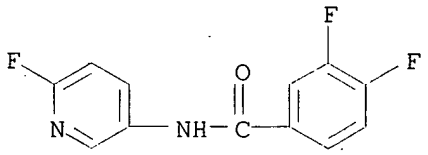
RN 325457-98-5 CAPLUS
CN Benzamide, N-(6-chloro-3-pyridinyl)-4-fluoro- (9CI) (CA INDEX NAME)



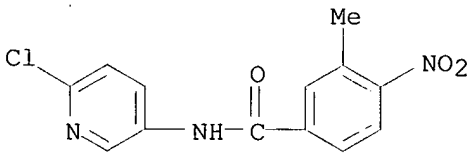
RN 325457-99-6 CAPLUS
CN Benzamide, 4-chloro-N-(6-chloro-3-pyridinyl)- (9CI) (CA INDEX NAME)



RN 325458-00-2 CAPLUS
CN Benzamide, 3,4-difluoro-N-(6-fluoro-3-pyridinyl)- (9CI) (CA INDEX NAME)



RN 325458-01-3 CAPLUS
CN Benzamide, N-(6-chloro-3-pyridinyl)-3-methyl-4-nitro- (9CI) (CA INDEX NAME)



RN 325458-21-7 CAPLUS
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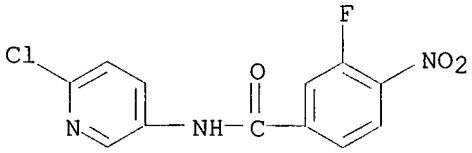

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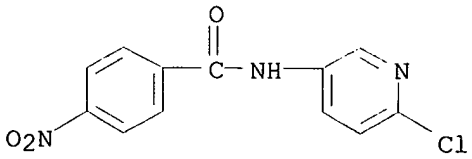
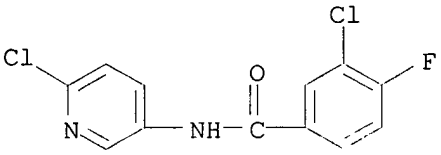
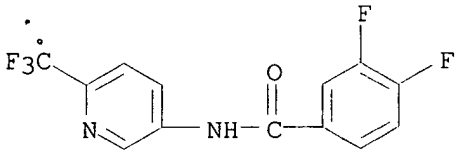
CN Benzamide, N-(6-chloro-3-pyridinyl)-4-nitro- (9CI) (CA INDEX NAME)



RN 325458-27-3 CAPLUS
CN Benzamide, 3-chloro-N-(6-chloro-3-pyridinyl)-4-fluoro- (9CI) (CA INDEX NAME)



RN 325458-32-0 CAPLUS
CN Benzamide, 3,4-difluoro-N-[6-(trifluoromethyl)-3-pyridinyl]- (9CI) (CA INDEX NAME)



L82 ANSWER 2 OF 19 CAPLUS COPYRIGHT 2003 ACS on STN
ACCESSION NUMBER: 2001:565011 CAPLUS
DOCUMENT NUMBER: 135:137520
TITLE: Preparation of benzoylamides, nicotinamides, pyrimidinecarboxamides, pyrrolylcarboxamides, and analogs as activators of caspase and inducers of apoptosis and the use thereof
INVENTOR(S): Cai, Sui Xiong; Drewe, John A.
PATENT ASSIGNEE(S): Cytovia, Inc., USA
SOURCE: PCT Int. Appl., 90 pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2001055115	A1	20010802	WO 2001-US2478	20010126
W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CR, CU, CZ, DE, DK, DM, DZ, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, UZ, VN, YU, ZA, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM				
RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG				
US 2002010185	A1	20020124	US 2001-769420	20010126
EP 1257536	A1	20021120	EP 2001-903311	20010126
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR				
JP 2003520854	T2	20030708	JP 2001-555057	20010126

PRIORITY APPLN. INFO.: US 2000-177648P P 20000127
WO 2001-US2478 W 20010126
OTHER SOURCE(S): MARPAT 135:137520
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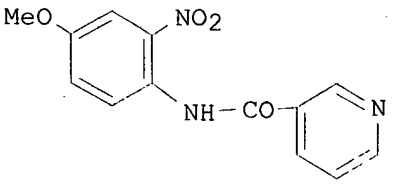


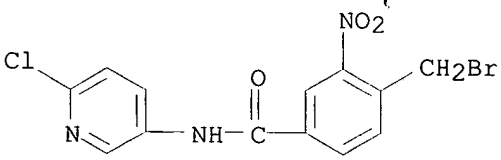
I

AB Title compds. [ArlCONR11Ar; Ar, Arl independently = aryl, heteroaryl with less than two nitrogen; R11 = H, alkyl, cycloalkyl, aryl, heteroaryl], or a pharmaceutically acceptable salt, or prodrug thereof are prepd. and method of treating a disorder responsive to the induction of apoptosis in mammal in need of treatment. The present invention relates to the discovery that title compds. are activators of caspase and inducers of apoptosis. Title compds. of this invention may be used to induce cell death in a variety of clin. conditions in which uncontrolled growth and spread of abnormal cells occurs. Thus, the title compd. I was prepd. and biol. tested for caspase activity with cancer cell lines T47D and ZR75-1, for induced nuclear fragmentation and mitotic arrest in Jurkat cells, and for cell cycle arrest and apoptosis in solid tumor cell lines.

IT **352228-97-8P**
RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)
(prepn. of benzamides, nicotinamides, pyrimidinecarboxamides, pyrrolylcarboxamides, and analogs as activators of caspase and inducers of apoptosis and use thereof)

RN 352228-97-8 CAPLUS

CN Benzamide, 4-(bromomethyl)-N-(6-chloro-3-pyridinyl)-3-nitro- (9CI) (CA INDEX NAME)



REFERENCE COUNT: 22 THERE ARE 22 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L82 ANSWER 3 OF 19 CAPLUS COPYRIGHT 2003 ACS on STN
ACCESSION NUMBER: 2001:114932 CAPLUS
DOCUMENT NUMBER: 134:157577
TITLE: Benzanilides as potassium channel openers, compositions, and preparation thereof
INVENTOR(S): McNaughton-Smith, Grant Andrew; Gross, Michael Francis; Wickenden, Alan David
PATENT ASSIGNEE(S): Icagen, Inc., USA
SOURCE: PCT Int. Appl., 55 pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 3
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2001010380	A2	20010215	WO 2000-US21308	20000804

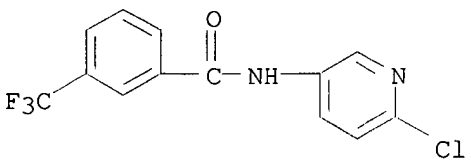
WO 2001010380 A3 20010816
W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CR, CU, CZ, DE, DK, DM, DZ, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM
RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG
AU 2000067585 A5 20010305 AU 2000-67585 20000804
US 6326385 B1 20011204 US 2000-631747 20000804
EP 1208085 A2 20020529 EP 2000-955367 20000804
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL
JP 2003506387 T2 20030218 JP 2001-514905 20000804
US 2002013349 A1 20020131 US 2001-939230 20010824
PRIORITY APPLN. INFO.: US 1999-147221P P 19990804
US 1999-158712P P 19991008
US 1999-165847P P 19991116
US 2000-631747 A 20000804
US 2000-632576 A 20000804
WO 2000-US21308 W 20000804

OTHER SOURCE(S): MARPAT 134:157577

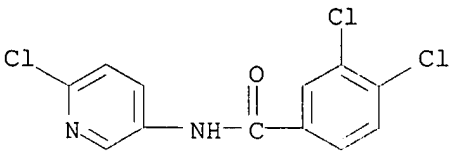
AB Benzanilides are provided which are voltage-dependent potassium channel openers. Compns. and methods of using the benzanilides are also provided. The compds. of the invention are useful for the treatment of central and peripheral nervous system disorders.

IT **325457-87-2P 325457-88-3P 325457-90-7P**
325457-91-8P 325457-93-0P 325457-94-1P
325457-95-2P 325457-96-3P 325457-97-4P
325457-98-5P 325457-99-6P 325458-00-2P
325458-01-3P 325458-21-7P 325458-26-2P
325458-27-3P 325458-32-0P
RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)
(benzanilides as potassium channel openers, compns., and prepn.)

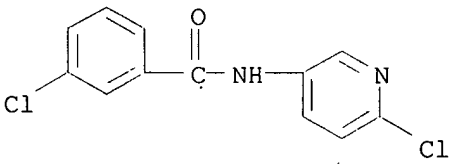
RN 325457-87-2 CAPLUS
CN Benzamide, N-(6-chloro-3-pyridinyl)-3-(trifluoromethyl)- (9CI) (CA INDEX NAME)



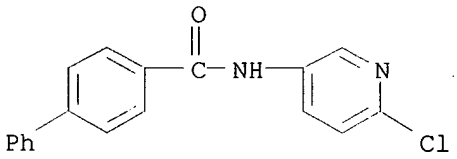
RN 325457-88-3 CAPLUS
CN Benzamide, 3,4-dichloro-N-(6-chloro-3-pyridinyl)- (9CI) (CA INDEX NAME)



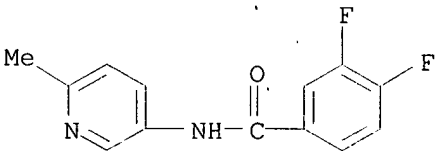
RN 325457-90-7 CAPLUS
CN Benzamide, 3-chloro-N-(6-chloro-3-pyridinyl)- (9CI) (CA INDEX NAME)



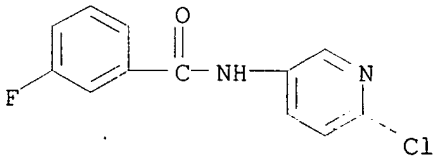
RN 325457-91-8 CAPLUS
CN [1,1'-Biphenyl]-4-carboxamide, N-(6-chloro-3-pyridinyl)- (9CI) (CA INDEX NAME)



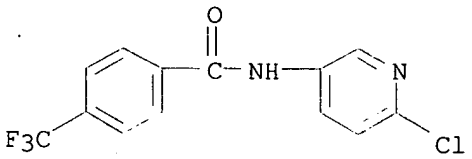
RN 325457-93-0 CAPLUS
CN Benzamide, 3,4-difluoro-N-(6-methyl-3-pyridinyl)- (9CI) (CA INDEX NAME)



RN 325457-94-1 CAPLUS
CN Benzamide, N-(6-chloro-3-pyridinyl)-3-fluoro- (9CI) (CA INDEX NAME)

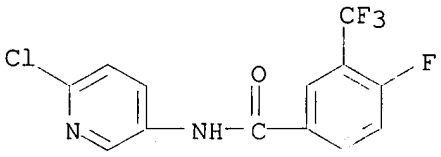


RN 325457-95-2 CAPLUS
CN Benzamide, N-(6-chloro-3-pyridinyl)-4-(trifluoromethyl)- (9CI) (CA INDEX NAME)

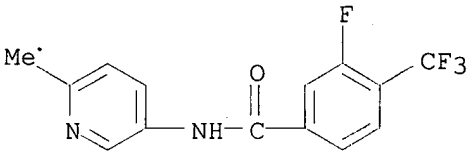


RN 325457-96-3 CAPLUS

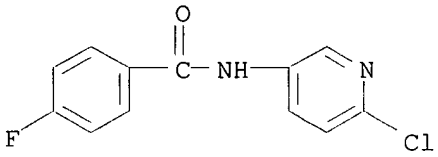
CN Benzamide, N-(6-chloro-3-pyridinyl)-4-fluoro-3-(trifluoromethyl)- (9CI) (CA INDEX NAME)



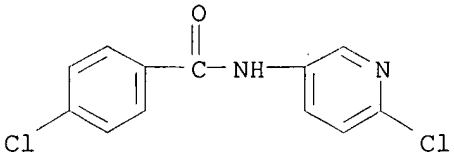
RN 325457-97-4 CAPLUS
CN Benzamide, 3-fluoro-N-(6-methyl-3-pyridinyl)-4-(trifluoromethyl)- (9CI) (CA INDEX NAME)



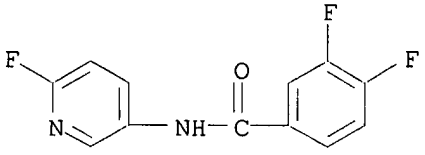
RN 325457-98-5 CAPLUS
CN Benzamide, N-(6-chloro-3-pyridinyl)-4-fluoro- (9CI) (CA INDEX NAME)



RN 325457-99-6 CAPLUS
CN Benzamide, 4-chloro-N-(6-chloro-3-pyridinyl)- (9CI) (CA INDEX NAME)

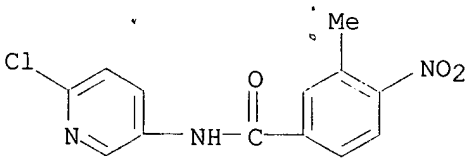


RN 325458-00-2 CAPLUS
CN Benzamide, 3,4-difluoro-N-(6-fluoro-3-pyridinyl)- (9CI) (CA INDEX NAME)

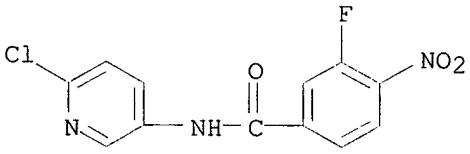


RN 325458-01-3 CAPLUS
CN Benzamide, N-(6-chloro-3-pyridinyl)-3-methyl-4-nitro- (9CI) (CA INDEX

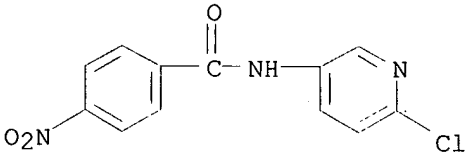
NAME)



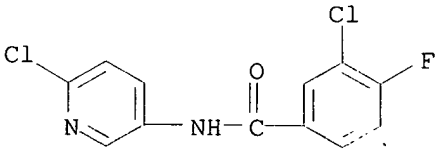
RN 325458-21-7 CAPLUS
CN Benzamide, N-(6-chloro-3-pyridinyl)-3-fluoro-4-nitro- (9CI) (CA INDEX NAME)



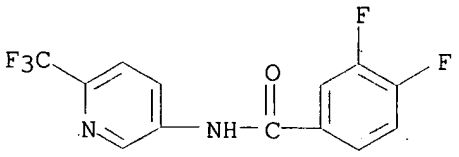
RN 325458-26-2 CAPLUS
CN Benzamide, N-(6-chloro-3-pyridinyl)-4-nitro- (9CI) (CA INDEX NAME)



RN 325458-27-3 CAPLUS
CN Benzamide, 3-chloro-N-(6-chloro-3-pyridinyl)-4-fluoro- (9CI) (CA INDEX NAME)

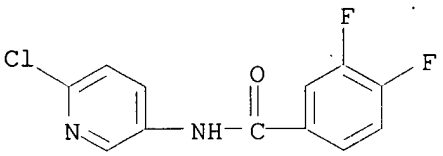


RN 325458-32-0 CAPLUS
CN Benzamide, 3,4-difluoro-N-[6-(trifluoromethyl)-3-pyridinyl]- (9CI) (CA INDEX NAME)



IT **325457-89-4P**

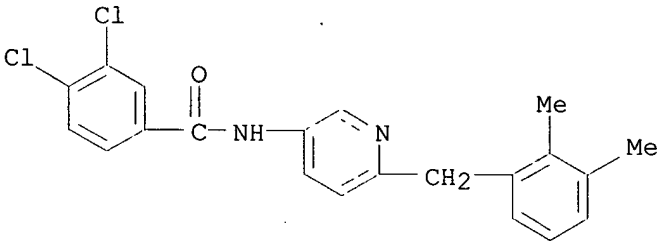
RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)
(reaction; benzanilides as potassium channel openers, compns., and prepn.)
RN 325457-89-4 CAPLUS
CN Benzamide, N-(6-chloro-3-pyridinyl)-3,4-difluoro- (9CI) (CA INDEX NAME)



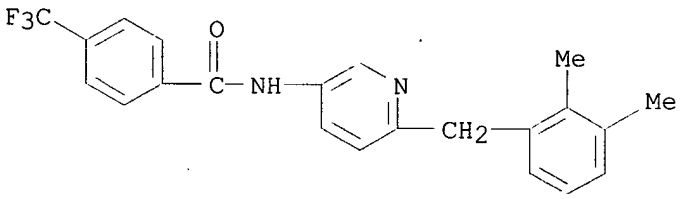
L82 ANSWER 4 OF 19 CAPLUS COPYRIGHT 2003 ACS on STN
ACCESSION NUMBER: 2001:237842 CAPLUS
DOCUMENT NUMBER: 134:266205
TITLE: Preparation of collagen formation-inhibiting benzene derivatives
INVENTOR(S): Kojima, Hiroshi; Sakamoto, Makoto; Yasumura, Koichi
PATENT ASSIGNEE(S): Ohtsuka Pharmaceutical Co., Ltd., Japan
SOURCE: Jpn. Kokai Tokkyo Koho, 97 pp.
CODEN: JKXXAF
DOCUMENT TYPE: Patent
LANGUAGE: Japanese
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 2001089412	A2	20010403	JP 1999-269015	19990922

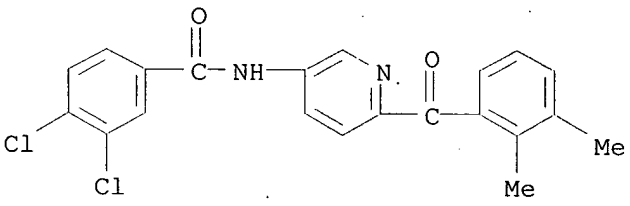
PRIORITY APPLN. INFO.: JP 1999-269015 19990922
OTHER SOURCE(S): MARPAT 134:266205
AB (R1)aC6H5-aVBWA [I; R1 = H, halo, OH, NO2, cyano, etc.; a = 1-5; V = NHCO, CONH, NHCONH, NHC(S)NH, SCH2CONH, etc.; B = p-C6H4, (un)substituted pyridine-2,5-diyl, pyrimidine-2,5-diyl, pyrazine-2,5-diyl, pyridine-2,3-diyl; W = O, S, SO, NH, CO, CH2, SO2; A = aryl] or their salts, useful for treatment of lung or liver fibrosis, are prepd. 3,4,5-Trimethoxybenzoic acid (440 mg) was amidated by 500 mg 3-amino-6-(4-tert-butylphenoxy)pyridine in the presence of 1-ethyl-3-(3-dimethylaminopropyl)carbodiimide.HCl and 1-hydroxybenzotriazole in DMF at room temp. for 1 day to give 750 mg I [(R1)a = 3,4,5-(OMe)3, V = CONH, B = pyridine-2,5-diyl, W = O, A = C6H4CMe3-p]. I [(R1)a = 3,4-Cl2, V = CONH, B = p-C6H4, W = O, A = 5-oxo-5,6,7,8-tetrahydronaphthalen-1-yl] in vitro inhibited TGF .beta.-1-induced collagen synthesis in human LI90 cells with IC50 of 2.37 .mu.M.
IT **332009-87-7P 332009-88-8P 332009-91-3P 332009-92-4P 332010-41-0P**
RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)
(prepn. of collagen formation-inhibiting benzene derivs.)
RN 332009-87-7 CAPLUS
CN Benzamide, 3,4-dichloro-N-[6-[(2,3-dimethylphenyl)methyl]-3-pyridinyl]- (9CI) (CA INDEX NAME)



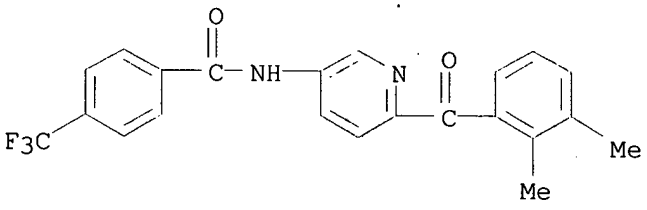
RN 332009-88-8 CAPLUS
CN Benzamide, N-[6-[(2,3-dimethylphenyl)methyl]-3-pyridinyl]-4-(trifluoromethyl)- (9CI) (CA INDEX NAME)



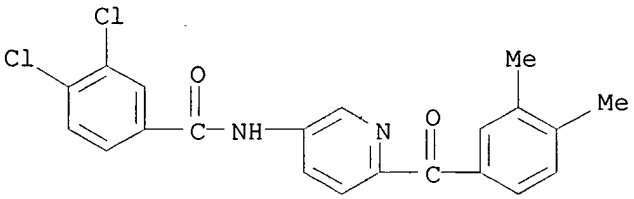
RN 332009-91-3 CAPLUS
CN Benzamide, 3,4-dichloro-N-[6-(2,3-dimethylbenzoyl)-3-pyridinyl]- (9CI) (CA INDEX NAME)



RN 332009-92-4 CAPLUS
CN Benzamide, N-[6-(2,3-dimethylbenzoyl)-3-pyridinyl]-4-(trifluoromethyl)- (9CI) (CA INDEX NAME)



RN 332010-41-0 CAPLUS
CN Benzamide, 3,4-dichloro-N-[6-(3,4-dimethylbenzoyl)-3-pyridinyl]- (9CI) (CA INDEX NAME)

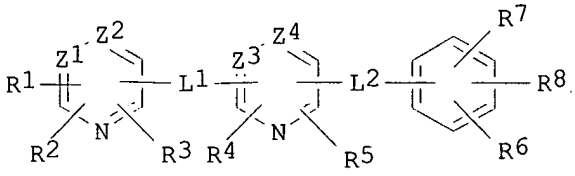


L82 ANSWER 5 OF 19 CAPLUS COPYRIGHT 2003 ACS on STN
ACCESSION NUMBER: 2000:553560 CAPLUS
DOCUMENT NUMBER: 133:164005
TITLE: Preparation of substituted N-heterocyclyl benzamides and analogs as G-protein coupled heptahelical receptor binding compounds
INVENTOR(S): Shiosaki, Kazumi; Fleming, Paul
PATENT ASSIGNEE(S): Millennium Pharmaceuticals, Inc., USA
SOURCE: PCT Int. Appl., 80 pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

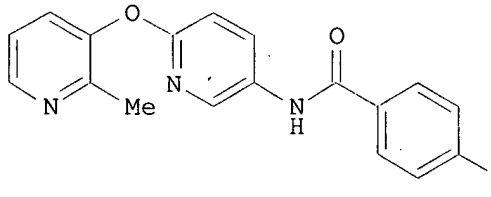
PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2000046203	A2	20000810	WO 2000-US3042	20000203
WO 2000046203	A3	20010301		
W: AE, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CR, CU, CZ, DE, DK, DM, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, UZ, VN, YU, ZA, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM				
RW: GH, GM, KE, LS, MW, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG				
EP 1150955	A2	20011107	EP 2000-907184	20000203
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO				

PRIORITY APPLN. INFO.: US 1999-118893P P 19990204
WO 2000-US3042 W 20000203

OTHER SOURCE(S): MARPAT 133:164005
GI



I



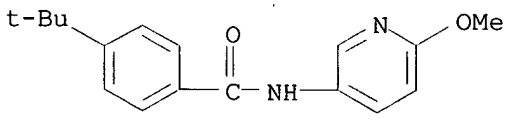
II

AB The title compds. (I) [wherein Z1-Z4 = independently N or C; R1-R8 = independently H, alkyl(amino), alkenyl, alkynyl, alkoxy, thioalkyl, hydroxyalkyl, halo(alkyl), NH2, or carboxyl; L1 = O, S, NH, NR7, (CHR7)n, C(O), CR7OH, or O(CHR7)n; n = 1-3; L2 = a bond, CH2C(O), NHC(O), OC(O), C(O), CH2NHC(O), NHC(O)CH2, CHOH, (CH2)n, O, NH, O(CH2)m, NH(CH2)m, CH2CHOH, and NR8C(O); m = 0-3] were prepd. for the treatment of neurol., immunol., inflammatory, cancer, and other .beta.-chemokine mediated disorders. For example, coupling of 2-methyl-3-hydroxypyridine with 2-chloro-5-nitropyridine in the presence of NaH (87%), followed by redn. of the nitro group using Fe/AcOH (51%) and acylation of the amine with 4-trifluoromethylbenzoyl chloride, gave II. In a time resolved fluorescence (TRF) assay, II showed very high binding affinity for the CCR10 receptor with IC50 of < 5 .mu.M.

IT **125125-17-9P 287943-86-6P 287943-90-2P 287943-91-3P**
RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)
(GPCR binding compd.; prepn. of substituted N-heterocyclyl benzamide .beta.-chemokine antagonists and analogs by coupling hydroxyheterocycles with 2-chloro-5-nitroheterocycles, redn. to the amines, and acylation with benzoyl chlorides)

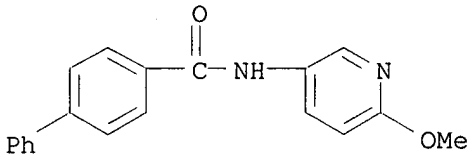
RN 125125-17-9 CAPLUS

CN Benzamide, 4-(1,1-dimethylethyl)-N-(6-methoxy-3-pyridinyl)- (9CI) (CA INDEX NAME)

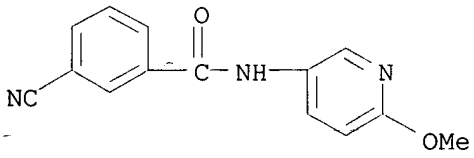


RN 287943-86-6 CAPLUS

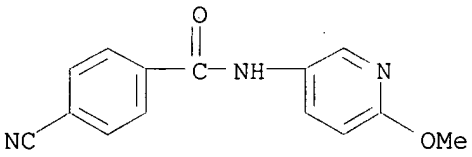
CN [1,1'-Biphenyl]-4-carboxamide, N-(6-methoxy-3-pyridinyl)- (9CI) (CA INDEX NAME)



RN 287943-90-2 CAPLUS
CN Benzamide, 3-cyano-N-(6-methoxy-3-pyridinyl)- (9CI) (CA INDEX NAME)



RN 287943-91-3 CAPLUS
CN Benzamide, 4-cyano-N-(6-methoxy-3-pyridinyl)- (9CI) (CA INDEX NAME)



L82 ANSWER 6 OF 19 CAPLUS COPYRIGHT 2003 ACS on STN
ACCESSION NUMBER: 1995:207703 CAPLUS
DOCUMENT NUMBER: 122:151405
TITLE: Use of synthetic retinoids for osteopathy.
INVENTOR(S): Shudo, Koichi; Sugioka, Tatsuo; Inazu, Mizuho; Tanaka, Hideyuki; Inoue, Tsutomu; Kitamura, Kazuyuki
PATENT ASSIGNEE(S): Hoechst Japan Ltd., Japan
SOURCE: Eur. Pat. Appl., 15 pp.
CODEN: EPXXDW
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

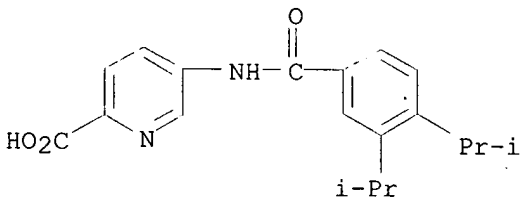
PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
EP 619116	A2	19941012	EP 1994-105021	19940330
EP 619116	A3	19941123		
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IE, IT, LI, LU, MC, NL, PT, SE				
CA 2120424	AA	19941006	CA 1994-2120424	19940331
JP 07017854	A2	19950120	JP 1994-62376	19940331
US 5525618	A	19960611	US 1994-221600	19940401
US 5716995	A	19980210	US 1995-478850	19950607
US 5703128	A	19971230	US 1996-613265	19960308
US 5767146	A	19980616	US 1997-934899	19970922

PRIORITY APPLN. INFO.: JP 1993-78320 19930405
US 1994-221600 19940401
US 1995-478850 19950607
OTHER SOURCE(S): MARPAT 122:151405
AB Arom. carboxylic acids (Markush included) are disclosed for therapeutic

and prophylactic treatment of osteopathies, e.g. osteoporosis and bone fracture. Prepn. of e.g. 4-[(3-isopropyl-4-isopropoxyphenyl)carboxamide]benzoic acid and 3-hydroxy-4-[(3-isopropyl-4-isopropoxyphenyl)carboxamide]-benzoic acid is described. Min. effective concns. of compds. of the invention for inducing significant increases of osteoblastic cell alk. phosphatase activity was detd. Effects in a bone atrophy animal model are also presented.

IT **161069-97-2**
RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(prepn. and use of arom. carboxylic acids for osteopathy treatment)

RN 161069-97-2 CAPLUS
CN 2-Pyridinecarboxylic acid, 5-[[3,4-bis(1-methylethyl)benzoyl]amino]- (9CI) (CA INDEX NAME)

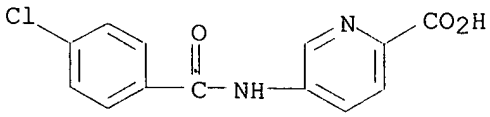


L82 ANSWER 7 OF 19 CAPLUS COPYRIGHT 2003 ACS on STN
ACCESSION NUMBER: 1992:123761 CAPLUS
DOCUMENT NUMBER: 116:123761
TITLE: Novel inhibitors of prolyl 4-hydroxylase. 2. 5-Amide substituted pyridine-2-carboxylic acids
AUTHOR(S): Tucker, Howard; Thomas, Dudley F.
CORPORATE SOURCE: ICI Pharm., Macclesfield/Cheshire, SK10 4TG, UK
SOURCE: Journal of Medicinal Chemistry (1992), 35(5), 804-7
CODEN: JMCMAR; ISSN: 0022-2623
DOCUMENT TYPE: Journal
LANGUAGE: English

AB A series of 5-[(arylcarbonyl)amino]- and 5-(arylcarbamoyl)pyridine-2-carboxylic acids was prepd. and tested for activity as inhibitors of the enzyme prolyl 4-hydroxylase (EC 1.14.11.2). All of the analogs prepd. were inhibitors of the enzyme in vitro, the best compds. being equipotent with the known inhibitor, pyridine-2,5-dicarboxylic acid (I). Like I, these amidic analogs were not active in a cultured embryonic chick tendon cell model, considered to be a predictor of in vivo activity. The activity of the amides was not consistent with the model described for the mode of action of I with the enzyme and aspects of this are discussed.

IT **138815-73-3P 138815-75-5P 138815-79-9P**
RL: SPN (Synthetic preparation); PREP (Preparation)
(prepn. and prolyl hydroxylase inhibition by)

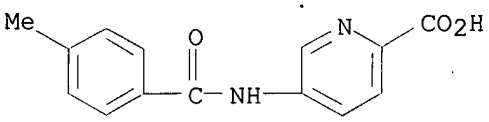
RN 138815-73-3 CAPLUS
CN 2-Pyridinecarboxylic acid, 5-[(4-chlorobenzoyl)amino]- (9CI) (CA INDEX NAME)



RN 138815-75-5 CAPLUS
CN 2-Pyridinecarboxylic acid, 5-[(4-methylbenzoyl)amino]-, monoacetate (9CI) (CA INDEX NAME)

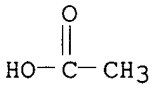
CM 1

CRN 138815-74-4
CMF C14 H12 N2 O3



CM 2

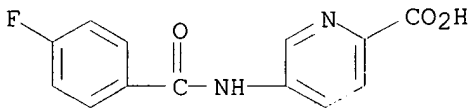
CRN 64-19-7
CMF C2 H4 O2



RN 138815-79-9 CAPLUS
CN 2-Pyridinecarboxylic acid, 5-[(4-fluorobenzoyl)amino]-, monoacetate (9CI) (CA INDEX NAME)

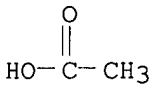
CM 1

CRN 138815-78-8
CMF C13 H9 F N2 O3

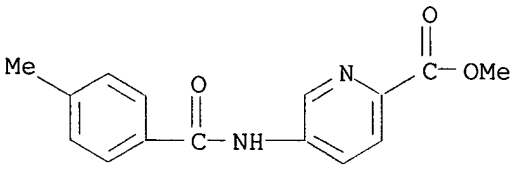


CM 2

CRN 64-19-7
CMF C2 H4 O2



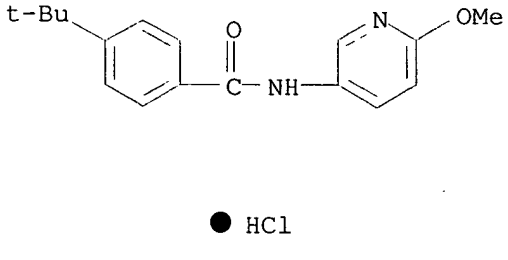
IT **138815-76-6P**
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)
(prepn. and sapon. of)
RN 138815-76-6 CAPLUS
CN 2-Pyridinecarboxylic acid, 5-[(4-methylbenzoyl)amino]-, methyl ester (9CI) (CA INDEX NAME)



L82 ANSWER 8 OF 19 CAPLUS COPYRIGHT 2003 ACS on STN
ACCESSION NUMBER: 1990:76956 CAPLUS
DOCUMENT NUMBER: 112:76956
TITLE: Preparation of tertiary-butylphenylcarbamoylpyridines as cardiovascular agents
INVENTOR(S): Von der Saal, Wolfgang; Mertens, Alfred; Zilch, Harald; Boehm, Erwin; Martin, Ulrich
PATENT ASSIGNEE(S): Boehringer Mannheim G.m.b.H., Fed. Rep. Ger.
SOURCE: Ger. Offen., 13 pp.
CODEN: GWXXBX
DOCUMENT TYPE: Patent
LANGUAGE: German
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
DE 3804346	A1	19890824	DE 1988-3804346	19880212

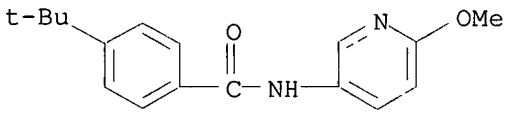
PRIORITY APPLN. INFO.: DE 1988-3804346 19880212
OTHER SOURCE(S): CASREACT 112:76956; MARPAT 112:76956
GI For diagram(s), see printed CA Issue.
AB The title compds. [I; R1 = H, alkyl, alkenyl, alkynyl, cycloalkyl, cycloalkenyl, halo, OH, alkoxy, alkenyloxy, alkynyloxy, cycloalkoxy, cycloalkenyloxy, alkylthio, imidazolyl, triazolyl, morpholinyl, thiomorphilinyl, (substituted) pyridinyloxy, pyridinylthio, quinolinyloxy, naphthyloxy, indolyloxy, oxindolyloxy, etc.; A-B = CONH, NHCO]; useful as cardiovascular agents (no data), were prepd. Thus, 4-Me3CC6H4COCl in CH2Cl2 was added to 5-amino-2-(1-cyanophenyloxy)pyridine and Et3N in CH2Cl2 with ice cooling. The mixt. was stirred 10 min at room temp. to give 23% 4-tert-butyl-N-[6(4-cyanophenyloxy)-3-pyridinyl)benzamide.
IT **125125-16-8P 125125-17-9P**
RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)
(prepn. of, as cardiovascular agent)
RN 125125-16-8 CAPLUS
CN Benzamide, 4-(1,1-dimethylethyl)-N-(6-methoxy-3-pyridinyl)-, monohydrochloride (9CI) (CA INDEX NAME)



● HCl

RN 125125-17-9 CAPLUS
CN Benzamide, 4-(1,1-dimethylethyl)-N-(6-methoxy-3-pyridinyl)- (9CI) (CA

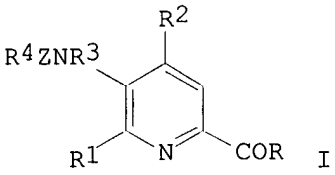
INDEX NAME)



L82 ANSWER 9 OF 19 CAPLUS COPYRIGHT 2003 ACS on STN
ACCESSION NUMBER: 1978:529412 CAPLUS
DOCUMENT NUMBER: 89:129412
TITLE: Substituted 5-amino-2-pyridinecarboxylic acid compounds
INVENTOR(S): Finch, Neville
PATENT ASSIGNEE(S): Ciba-Geigy A.-G., Switz.
SOURCE: Ger. Offen., 63 pp.
CODEN: GWXXBX
DOCUMENT TYPE: Patent
LANGUAGE: German
FAMILY ACC. NUM. COUNT: 2
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
DE 2756771	A1	19780629	DE 1977-2756771	19771220
ZA 7705350	A	19780726	ZA 1977-5350	19770906
FI 7703845	A	19780624	FI 1977-3845	19771219
FR 2378767	A1	19780825	FR 1977-38445	19771220
ES 465288	A1	19780916	ES 1977-465288	19771221
BE 862157	A1	19780622	BE 1977-183713	19771222
DK 7705754	A	19780624	DK 1977-5754	19771222
SE 7714655	A	19780624	SE 1977-14655	19771222
ZA 7707628	A	19781025	ZA 1977-7628	19771222
JP 53079872	A2	19780714	JP 1977-155477	19771223

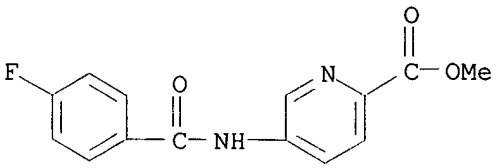
PRIORITY APPLN. INFO.: US 1976-753975 19761223
GI



AB The pyridinecarboxylic acids I [R = OH, OMe, NH2, Na, NHNH2, etc.; R1 = R2 = H, lower alkyl or alkoxy; R3 = H, alkyl, aralkyl; R4 = H, halogen, alkoxy, alkylthio, (un)substituted Ph or NH2; Z = C1-7 alkylene or alkenylene] and their N-oxides were prepd. for use as antihypertensives at 0.1-200 mg/kg/day. Thus, 3-ClC6H4CHO was treated with Me 5-aminoisonicotinoate, and the product reduced by NaBH4 to give I (R = OMe, R1-R3 = H, R4Z = 3-ClC6H4CH2).

IT **67516-51-2P**
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)
(prepn. and redn. of)

RN 67516-51-2 CAPLUS
CN 2-Pyridinecarboxylic acid, 5-[(4-fluorobenzoyl)amino]-, methyl ester (9CI) (CA INDEX NAME)



L82 ANSWER 10 OF 19 USPATFULL on STN
ACCESSION NUMBER: 2002:172364 USPATFULL
TITLE: Benzanilides as potassium channel openers
INVENTOR(S): McNaughton-Smith, Grant A., Morrisville, NC, UNITED STATES
Gross, Michael F., Durham, NC, UNITED STATES
Wickenden, Alan D., Cary, NC, UNITED STATES
PATENT ASSIGNEE(S): Icagen, Inc., Durham, NC, UNITED STATES, 27703 (2)

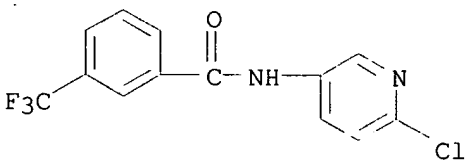
	NUMBER	KIND	DATE
PATENT INFORMATION:	US 2002091122	A1	20020711
APPLICATION INFO.:	US 2001-4122	A1	20011206 (10)

RELATED APPLN. INFO.: Division of Ser. No. US 2000-632576, filed on 4 Aug 2000, GRANTED, Pat. No. US 6372767

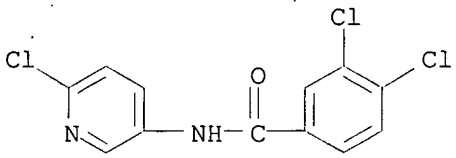
	NUMBER	DATE
PRIORITY INFORMATION:	US 1999-147221P	19990804 (60)

DOCUMENT TYPE: Utility
FILE SEGMENT: APPLICATION
LEGAL REPRESENTATIVE: TOWNSEND AND TOWNSEND AND CREW, LLP, TWO EMBARCADERO CENTER, EIGHTH FLOOR, SAN FRANCISCO, CA, 94111-3834
NUMBER OF CLAIMS: 48
EXEMPLARY CLAIM: 1
NUMBER OF DRAWINGS: 6 Drawing Page(s)
LINE COUNT: 1718
CAS INDEXING IS AVAILABLE FOR THIS PATENT.
AB Benzanilides are provided which are voltage-dependent potassium channel openers. Methods of using the benzanilides of the invention are also provided.

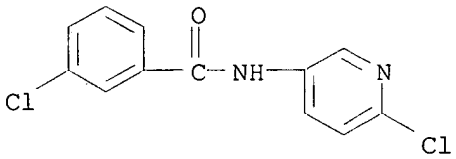
CAS INDEXING IS AVAILABLE FOR THIS PATENT.
IT **325457-87-2P 325457-88-3P 325457-90-7P**
325457-91-8P 325457-93-0P 325457-94-1P
325457-95-2P 325457-96-3P 325457-97-4P
325457-98-5P 325457-99-6P 325458-00-2P
325458-01-3P 325458-21-7P 325458-26-2P
325458-27-3P 325458-32-0P
(benzanilides as potassium channel openers, compns., and prepn.)
RN 325457-87-2 USPATFULL
CN Benzamide, N-(6-chloro-3-pyridinyl)-3-(trifluoromethyl)- (9CI) (CA INDEX NAME)



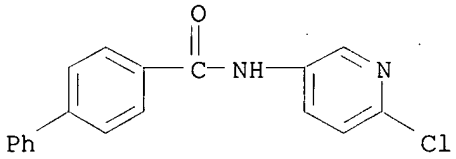
RN 325457-88-3 USPATFULL
CN Benzamide, 3,4-dichloro-N-(6-chloro-3-pyridinyl)- (9CI) (CA INDEX NAME)



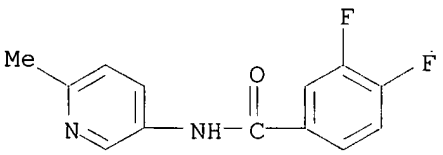
RN 325457-90-7 USPATFULL
CN Benzamide, 3-chloro-N-(6-chloro-3-pyridinyl)- (9CI) (CA INDEX NAME)



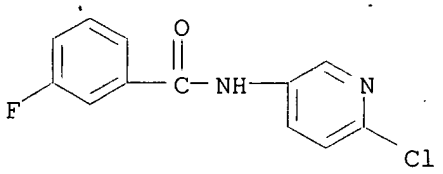
RN 325457-91-8 USPATFULL
CN [1,1'-Biphenyl]-4-carboxamide, N-(6-chloro-3-pyridinyl)- (9CI) (CA INDEX NAME)



RN 325457-93-0 USPATFULL
CN Benzamide, 3,4-difluoro-N-(6-methyl-3-pyridinyl)- (9CI) (CA INDEX NAME)

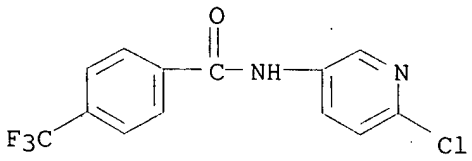


RN 325457-94-1 USPATFULL
CN Benzamide, N-(6-chloro-3-pyridinyl)-3-fluoro- (9CI) (CA INDEX NAME)

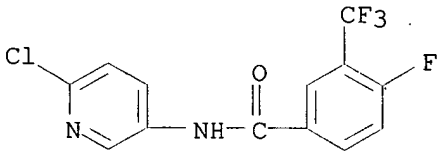


RN 325457-95-2 USPATFULL

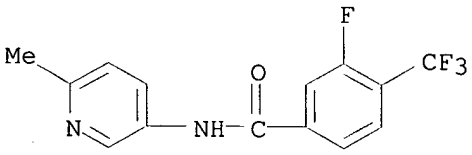
CN Benzamide, N-(6-chloro-3-pyridinyl)-4-(trifluoromethyl)- (9CI) (CA INDEX NAME)



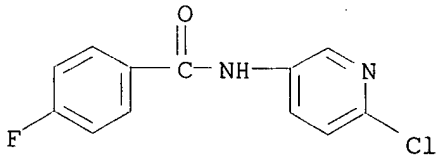
RN 325457-96-3 USPATFULL
CN Benzamide, N-(6-chloro-3-pyridinyl)-4-fluoro-3-(trifluoromethyl)- (9CI) (CA INDEX NAME)



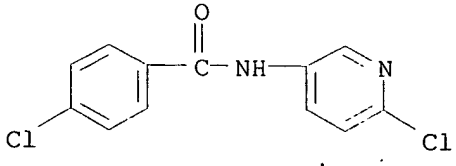
RN 325457-97-4 USPATFULL
CN Benzamide, 3-fluoro-N-(6-methyl-3-pyridinyl)-4-(trifluoromethyl)- (9CI) (CA INDEX NAME)



RN 325457-98-5 USPATFULL
CN Benzamide, N-(6-chloro-3-pyridinyl)-4-fluoro- (9CI) (CA INDEX NAME)

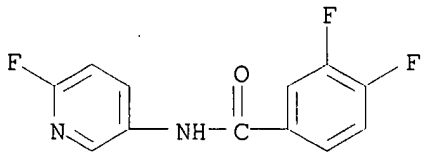


RN 325457-99-6 USPATFULL
CN Benzamide, 4-chloro-N-(6-chloro-3-pyridinyl)- (9CI) (CA INDEX NAME)

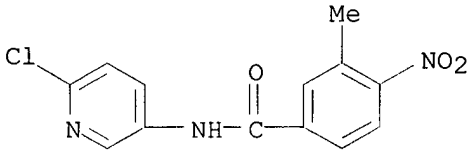


RN 325458-00-2 USPATFULL

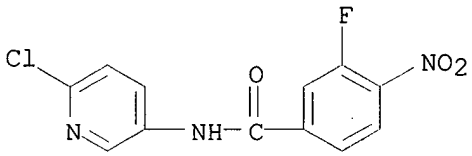
CN Benzamide, 3,4-difluoro-N-(6-fluoro-3-pyridinyl)- (9CI) (CA INDEX NAME)



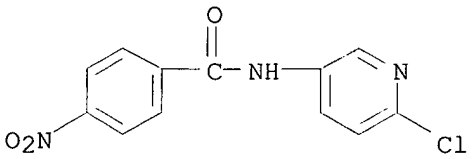
RN 325458-01-3 USPATFULL
CN Benzamide, N-(6-chloro-3-pyridinyl)-3-methyl-4-nitro- (9CI) (CA INDEX NAME)



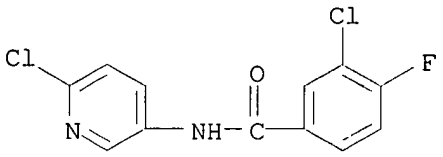
RN 325458-21-7 USPATFULL
CN Benzamide, N-(6-chloro-3-pyridinyl)-3-fluoro-4-nitro- (9CI) (CA INDEX NAME)



RN 325458-26-2 USPATFULL
CN Benzamide, N-(6-chloro-3-pyridinyl)-4-nitro- (9CI) (CA INDEX NAME)

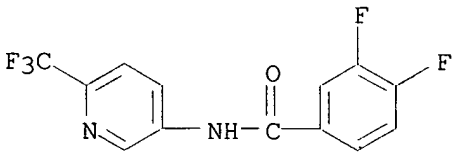


RN 325458-27-3 USPATFULL
CN Benzamide, 3-chloro-N-(6-chloro-3-pyridinyl)-4-fluoro- (9CI) (CA INDEX NAME)

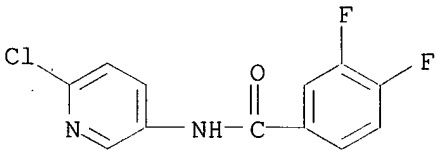


RN 325458-32-0 USPATFULL

CN Benzamide, 3,4-difluoro-N-[6-(trifluoromethyl)-3-pyridinyl]- (9CI) (CA INDEX NAME)



IT **325457-89-4P**
(reaction; benzanilides as potassium channel openers, compns., and prepn.)
RN 325457-89-4 USPATFULL
CN Benzamide, N-(6-chloro-3-pyridinyl)-3,4-difluoro- (9CI) (CA INDEX NAME)



L82 ANSWER 11 OF 19 USPATFULL on STN

ACCESSION NUMBER:	2002:99492 USPATFULL
TITLE:	Benzanilides as potassium channel openers
INVENTOR(S):	McNaughton-Smith, Grant A., Morrisville, NC, UNITED STATES Gross, Michael F., Durham, NC, UNITED STATES Wickenden, Alan D., Cary, NC, UNITED STATES
PATENT ASSIGNEE(S):	Icagen, Inc., Durham, NC, UNITED STATES, 27703 (U.S. corporation)

	NUMBER	KIND	DATE
PATENT INFORMATION:	US 2002052393	A1	20020502
	US 6605725	B2	20030812
APPLICATION INFO.:	US 2001-2800	A1	20011102 (10)
RELATED APPLN. INFO.:	Division of Ser. No. US 2000-632576, filed on 4 Aug 2000, PENDING		

	NUMBER	DATE
PRIORITY INFORMATION:	US 1999-147221P	19990804 (60)

DOCUMENT TYPE:	Utility
FILE SEGMENT:	APPLICATION
LEGAL REPRESENTATIVE:	TOWNSEND AND TOWNSEND AND CREW, LLP, TWO EMBARCADERO CENTER, EIGHTH FLOOR, SAN FRANCISCO, CA, 94111-3834
NUMBER OF CLAIMS:	48
EXEMPLARY CLAIM:	1
NUMBER OF DRAWINGS:	6 Drawing Page(s)
LINE COUNT:	1704

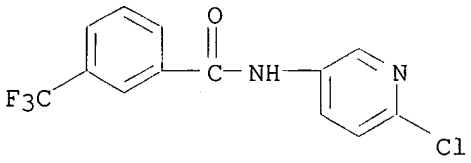
CAS INDEXING IS AVAILABLE FOR THIS PATENT.

AB Benzanilides are provided which are voltage-dependent potassium channel openers. Methods of using the benzanilides of the invention are also provided.

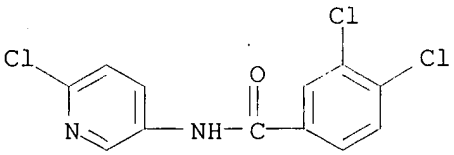
CAS INDEXING IS AVAILABLE FOR THIS PATENT.

IT **325457-87-2P 325457-88-3P 325457-90-7P**
325457-91-8P 325457-93-0P 325457-94-1P
325457-95-2P 325457-96-3P 325457-97-4P
325457-98-5P 325457-99-6P 325458-00-2P
325458-01-3P 325458-21-7P 325458-26-2P
325458-27-3P 325458-32-0P
(benzanilides as potassium channel openers, compns., and prepn.)

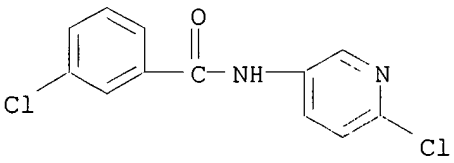
RN 325457-87-2 USPATFULL
CN Benzamide, N-(6-chloro-3-pyridinyl)-3-(trifluoromethyl)- (9CI) (CA INDEX NAME)



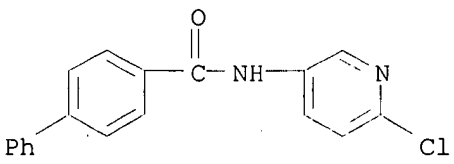
RN 325457-88-3 USPATFULL
CN Benzamide, 3,4-dichloro-N-(6-chloro-3-pyridinyl)- (9CI) (CA INDEX NAME)



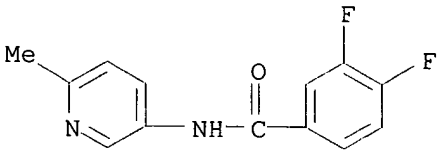
RN 325457-90-7 USPATFULL
CN Benzamide, 3-chloro-N-(6-chloro-3-pyridinyl)- (9CI) (CA INDEX NAME)



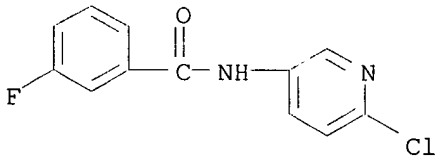
RN 325457-91-8 USPATFULL
CN [1,1'-Biphenyl]-4-carboxamide, N-(6-chloro-3-pyridinyl)- (9CI) (CA INDEX NAME)



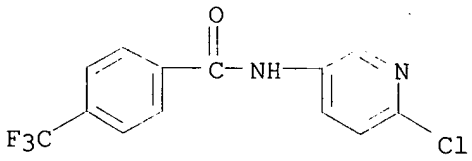
RN 325457-93-0 USPATFULL
CN Benzamide, 3,4-difluoro-N-(6-methyl-3-pyridinyl)- (9CI) (CA INDEX NAME)



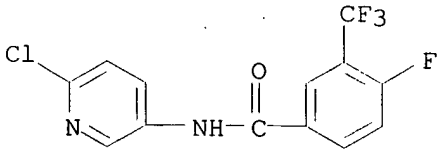
RN 325457-94-1 USPATFULL
CN Benzamide, N-(6-chloro-3-pyridinyl)-3-fluoro- (9CI) (CA INDEX NAME)



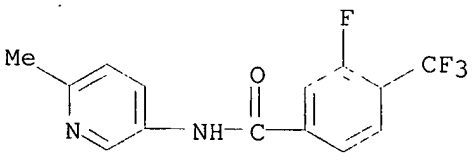
RN 325457-95-2 USPATFULL
CN Benzamide, N-(6-chloro-3-pyridinyl)-4-(trifluoromethyl)- (9CI) (CA INDEX NAME)



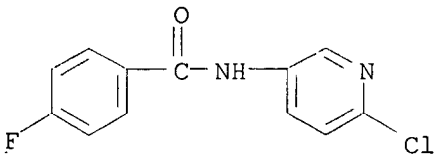
RN 325457-96-3 USPATFULL
CN Benzamide, N-(6-chloro-3-pyridinyl)-4-fluoro-3-(trifluoromethyl)- (9CI) (CA INDEX NAME)



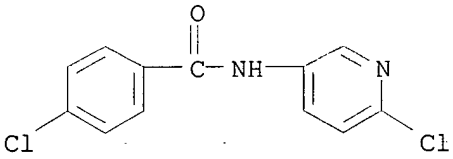
RN 325457-97-4 USPATFULL
CN Benzamide, 3-fluoro-N-(6-methyl-3-pyridinyl)-4-(trifluoromethyl)- (9CI) (CA INDEX NAME)



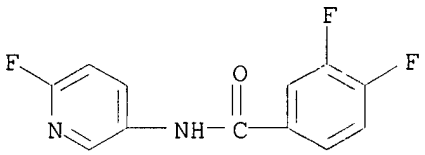
RN 325457-98-5 USPATFULL
CN Benzamide, N-(6-chloro-3-pyridinyl)-4-fluoro- (9CI) (CA INDEX NAME)



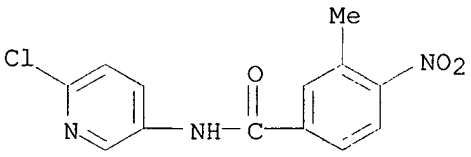
RN 325457-99-6 USPATFULL
CN Benzamide, 4-chloro-N-(6-chloro-3-pyridinyl)- (9CI) (CA INDEX NAME)



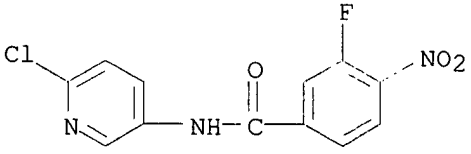
RN 325458-00-2 USPATFULL
CN Benzamide, 3,4-difluoro-N-(6-fluoro-3-pyridinyl)- (9CI) (CA INDEX NAME)



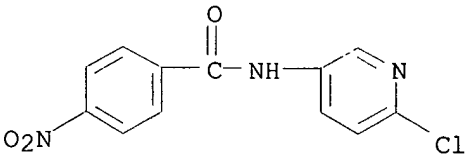
RN 325458-01-3 USPATFULL
CN Benzamide, N-(6-chloro-3-pyridinyl)-3-methyl-4-nitro- (9CI) (CA INDEX NAME)



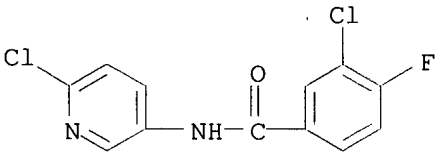
RN 325458-21-7 USPATFULL
CN Benzamide, N-(6-chloro-3-pyridinyl)-3-fluoro-4-nitro- (9CI) (CA INDEX NAME)



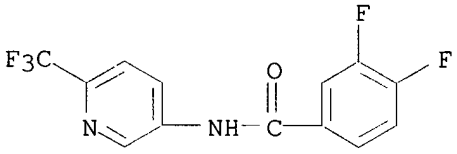
RN 325458-26-2 USPATFULL
CN Benzamide, N-(6-chloro-3-pyridinyl)-4-nitro- (9CI) (CA INDEX NAME)



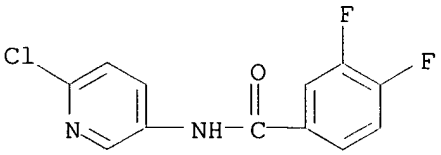
RN 325458-27-3 USPATFULL
CN Benzamide, 3-chloro-N-(6-chloro-3-pyridinyl)-4-fluoro- (9CI) (CA INDEX NAME)



RN 325458-32-0 USPATFULL
CN Benzamide, 3,4-difluoro-N-[6-(trifluoromethyl)-3-pyridinyl]- (9CI) (CA INDEX NAME)



IT **325457-89-4P**
(reaction; benzanilides as potassium channel openers, compns., and prepn.)
RN 325457-89-4 USPATFULL
CN Benzamide, N-(6-chloro-3-pyridinyl)-3,4-difluoro- (9CI) (CA INDEX NAME)



L82 ANSWER 12 OF 19 USPATFULL on STN
ACCESSION NUMBER: 2002:22513 USPATFULL
TITLE: Methods for treating or preventing pain and anxiety
INVENTOR(S): Wickenden, Alan David, Cary, NC, UNITED STATES
Rigdon, Gregory Cooksey, Durham, NC, UNITED STATES
McNaughton-Smith, Grant Andrew, Morrisville, NC, UNITED STATES
Gross, Michael Francis, Durham, NC, UNITED STATES

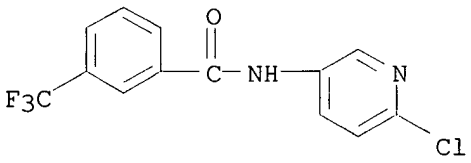
	NUMBER	KIND	DATE	
PATENT INFORMATION:	US 2002013349	A1	20020131	
APPLICATION INFO.:	US 2001-939230	A1	20010824	(9)

	NUMBER	DATE
PRIORITY INFORMATION:	US 2000-631747	20000804 (09)
	US 1999-147221P	19990804 (60)
	US 1999-158712P	19991008 (60)
	US 1999-165847P	19991116 (60)

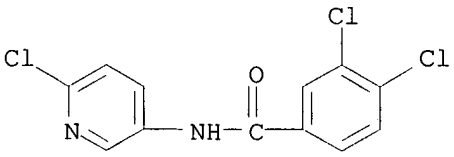
DOCUMENT TYPE: Utility
FILE SEGMENT: APPLICATION
LEGAL REPRESENTATIVE: TOWNSEND AND TOWNSEND AND CREW, TWO EMBARCADERO CENTER, EIGHTH FLOOR, SAN FRANCISCO, CA, 94111-3834
NUMBER OF CLAIMS: 82
EXEMPLARY CLAIM: 1
NUMBER OF DRAWINGS: 12 Drawing Page(s)
LINE COUNT: 1795
CAS INDEXING IS AVAILABLE FOR THIS PATENT.

AB The present invention relates to a novel method of treating of pain or anxiety, using compounds that modulate KCNQ potassium channels and currents.

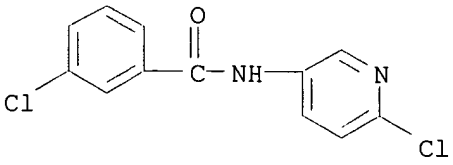
CAS INDEXING IS AVAILABLE FOR THIS PATENT.
IT **325457-87-2P 325457-88-3P 325457-90-7P**
325457-91-8P 325457-93-0P 325457-94-1P
325457-95-2P 325457-96-3P 325457-97-4P
325457-98-5P 325457-99-6P 325458-00-2P
325458-01-3P 325458-21-7P 325458-26-2P
325458-27-3P 325458-32-0P
(benzanilides as potassium channel openers, compns., and prepn.)
RN 325457-87-2 USPATFULL
CN Benzamide, N-(6-chloro-3-pyridinyl)-3-(trifluoromethyl)- (9CI) (CA INDEX NAME)



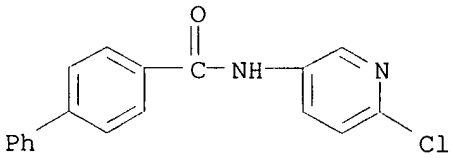
RN 325457-88-3 USPATFULL
CN Benzamide, 3,4-dichloro-N-(6-chloro-3-pyridinyl)- (9CI) (CA INDEX NAME)



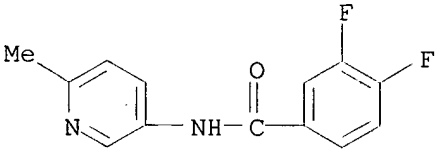
RN 325457-90-7 USPATFULL
CN Benzamide, 3-chloro-N-(6-chloro-3-pyridinyl)- (9CI) (CA INDEX NAME)



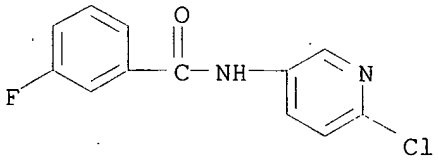
RN 325457-91-8 USPATFULL
CN [1,1'-Biphenyl]-4-carboxamide, N-(6-chloro-3-pyridinyl)- (9CI) (CA INDEX NAME)



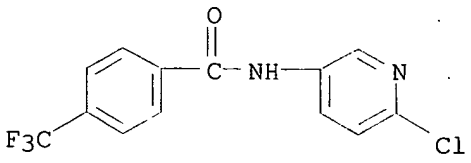
RN 325457-93-0 USPATFULL
CN Benzamide, 3,4-difluoro-N-(6-methyl-3-pyridinyl)- (9CI) (CA INDEX NAME)



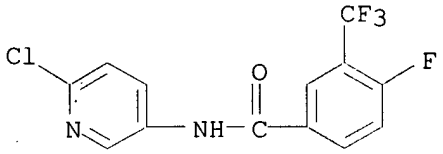
RN 325457-94-1 USPATFULL
CN Benzamide, N-(6-chloro-3-pyridinyl)-3-fluoro- (9CI) (CA INDEX NAME)



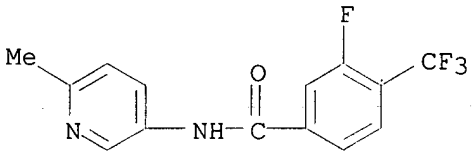
RN 325457-95-2 USPATFULL
CN Benzamide, N-(6-chloro-3-pyridinyl)-4-(trifluoromethyl)- (9CI) (CA INDEX NAME)



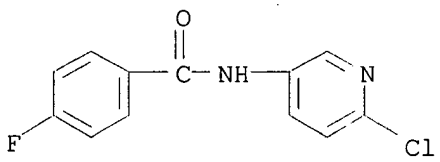
RN 325457-96-3 USPATFULL
CN Benzamide, N-(6-chloro-3-pyridinyl)-4-fluoro-3-(trifluoromethyl)- (9CI) (CA INDEX NAME)



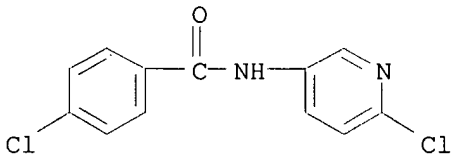
RN 325457-97-4 USPATFULL
CN Benzamide, 3-fluoro-N-(6-methyl-3-pyridinyl)-4-(trifluoromethyl)- (9CI) (CA INDEX NAME)



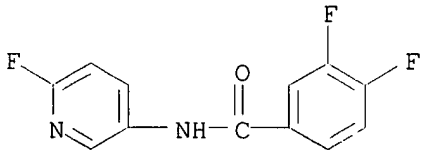
RN 325457-98-5 USPATFULL
CN Benzamide, N-(6-chloro-3-pyridinyl)-4-fluoro- (9CI) (CA INDEX NAME)



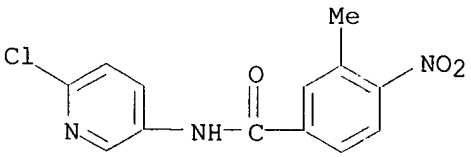
RN 325457-99-6 USPATFULL
CN Benzamide, 4-chloro-N-(6-chloro-3-pyridinyl)- (9CI) (CA INDEX NAME)



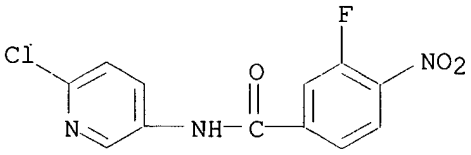
RN 325458-00-2 USPATFULL
CN Benzamide, 3,4-difluoro-N-(6-fluoro-3-pyridinyl)- (9CI) (CA INDEX NAME)



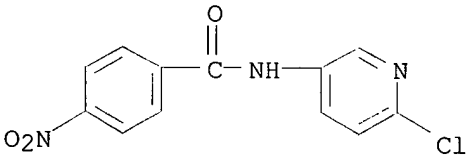
RN 325458-01-3 USPATFULL
CN Benzamide, N-(6-chloro-3-pyridinyl)-3-methyl-4-nitro- (9CI) (CA INDEX NAME)



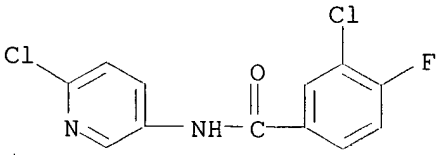
RN 325458-21-7 USPATFULL
CN Benzamide, N-(6-chloro-3-pyridinyl)-3-fluoro-4-nitro- (9CI) (CA INDEX NAME)



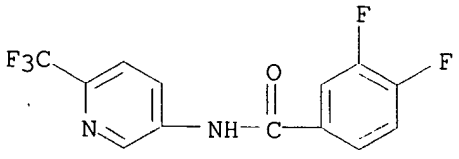
RN 325458-26-2 USPATFULL
CN Benzamide, N-(6-chloro-3-pyridinyl)-4-nitro- (9CI) (CA INDEX NAME)



RN 325458-27-3 USPATFULL
CN Benzamide, 3-chloro-N-(6-chloro-3-pyridinyl)-4-fluoro- (9CI) (CA INDEX NAME)

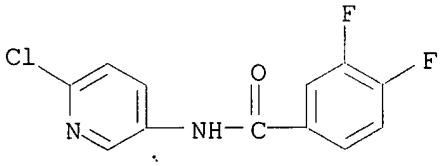


RN 325458-32-0 USPATFULL
CN Benzamide, 3,4-difluoro-N-[6-(trifluoromethyl)-3-pyridinyl]- (9CI) (CA INDEX NAME)



IT **325457-89-4P**
(reaction; benzanilides as potassium channel openers, compns., and prepn.)
RN 325457-89-4 USPATFULL

CN Benzamide, N-(6-chloro-3-pyridinyl)-3,4-difluoro- (9CI) (CA INDEX NAME)



L82 ANSWER 13 OF 19 USPATFULL on STN

ACCESSION NUMBER:	2002:17305 USPATFULL
TITLE:	Substituted nicotinamides and analogs as activators of caspases and inducers of apoptosis and the use thereof
INVENTOR(S):	Cai, Sui Xiong, San Diego, CA, UNITED STATES Drewe, John A., Carlsbad, CA, UNITED STATES
PATENT ASSIGNEE(S):	Cytovia, Inc. (U.S. corporation)

	NUMBER	KIND	DATE
PATENT INFORMATION:	US 2002010185	A1	20020124
APPLICATION INFO.:	US 2001-769420	A1	20010126 (9)

	NUMBER	DATE
PRIORITY INFORMATION:	US 2000-177648P	20000127 (60)

DOCUMENT TYPE:	Utility
FILE SEGMENT:	APPLICATION
LEGAL REPRESENTATIVE:	STERNE, KESSLER, GOLDSTEIN & FOX PLLC, 1100 NEW YORK AVENUE, N.W., SUITE 600, WASHINGTON, DC, 20005-3934
NUMBER OF CLAIMS:	73
EXEMPLARY CLAIM:	1
NUMBER OF DRAWINGS:	5 Drawing Page(s)
LINE COUNT:	2408

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

AB The present invention is directed to substituted nicotinamides and analogs thereof, represented by Formula V: ##STR1##

or a pharmaceutically acceptable salt or prodrug thereof, wherein:

Ar' and Ar are independently optionally substituted aryl or optionally substituted heteroaryl, provided that the ring structure of said optionally substituted heteroaryl comprises not more than two nitrogen atoms; and

R.sub.11 is hydrogen; or alkyl, cycloalkyl, aryl or heteroaryl, each of which is optionally substituted.

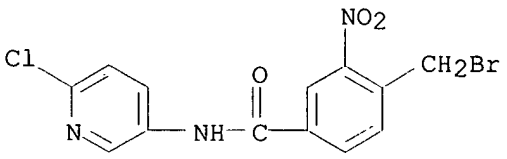
The present invention also relates to the discovery that compounds having Formula V are activators of caspases and inducers of apoptosis. Therefore, the compounds of this invention may be used to induce cell death in a variety of clinical conditions in which uncontrolled growth and spread of abnormal cells occurs.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

IT **352228-97-8P**, 4-Bromomethyl-3-nitro-N-(6-chloro-3-pyridyl)benzamide
(prepn. of benzamides, nicotinamides, pyrimidinecarboxamides, pyrrolylcarboxamides, and analogs as activators of caspase and inducers of apoptosis and use thereof)

RN 352228-97-8 USPATFULL

CN Benzamide, 4-(bromomethyl)-N-(6-chloro-3-pyridinyl)-3-nitro- (9CI) (CA INDEX NAME)



L82 ANSWER 14 OF 19 USPATFULL on STN

ACCESSION NUMBER:	2002:81507 USPATFULL
TITLE:	Benzanilides as potassium channel openers
INVENTOR(S):	McNaughton-Smith, Grant A., Morrisville, NC, United States Gross, Michael F., Durham, NC, United States Wickenden, Alan D., Cary, NC, United States
PATENT ASSIGNEE(S):	Icagen, Inc., Durham, NC, United States (U.S. corporation)

	NUMBER	KIND	DATE
PATENT INFORMATION:	US 6372767	B1	20020416
APPLICATION INFO.:	US 2000-632576		20000804 (9)

	NUMBER	DATE
PRIORITY INFORMATION:	US 1999-147221P	19990804 (60)

DOCUMENT TYPE:	Utility
FILE SEGMENT:	GRANTED
PRIMARY EXAMINER:	Davis, Zinna Northington
LEGAL REPRESENTATIVE:	Townsend and Townsend and Crew LLP
NUMBER OF CLAIMS:	6
EXEMPLARY CLAIM:	1
NUMBER OF DRAWINGS:	1 Drawing Figure(s); 6 Drawing Page(s)
LINE COUNT:	1540

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

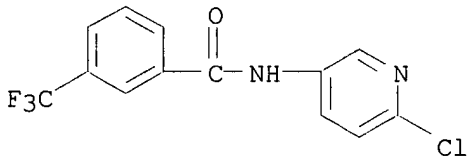
AB Benzanilides are provided which are voltage-dependent potassium channel openers. Methods of using the benzanilides of the invention are also provided.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

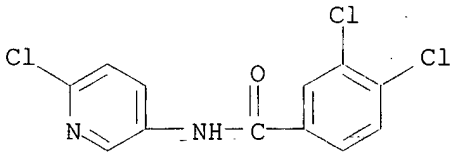
IT **325457-87-2P 325457-88-3P 325457-90-7P**
325457-91-8P 325457-93-0P 325457-94-1P
325457-95-2P 325457-96-3P 325457-97-4P
325457-98-5P 325457-99-6P 325458-00-2P
325458-01-3P 325458-21-7P 325458-26-2P
325458-27-3P 325458-32-0P
(benzanilides as potassium channel openers, compns., and prepn.)

RN 325457-87-2 USPATFULL

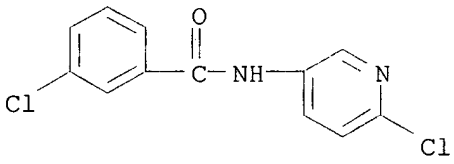
CN Benzamide, N-(6-chloro-3-pyridinyl)-3-(trifluoromethyl)- (9CI) (CA INDEX NAME)



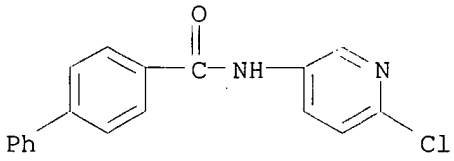
RN 325457-88-3 USPATFULL
CN Benzamide, 3,4-dichloro-N-(6-chloro-3-pyridinyl)- (9CI) (CA INDEX NAME)



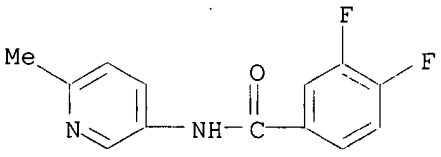
RN 325457-90-7 USPATFULL
CN Benzamide, 3-chloro-N-(6-chloro-3-pyridinyl)- (9CI) (CA INDEX NAME)



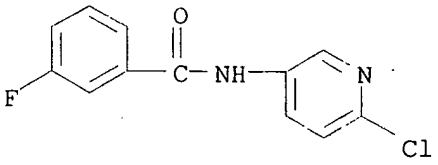
RN 325457-91-8 USPATFULL
CN [1,1'-Biphenyl]-4-carboxamide, N-(6-chloro-3-pyridinyl)- (9CI) (CA INDEX NAME)



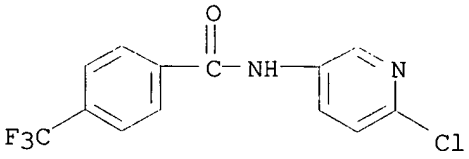
RN 325457-93-0 USPATFULL
CN Benzamide, 3,4-difluoro-N-(6-methyl-3-pyridinyl)- (9CI) (CA INDEX NAME)



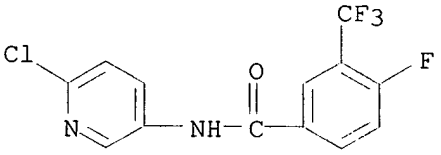
RN 325457-94-1 USPATFULL
CN Benzamide, N-(6-chloro-3-pyridinyl)-3-fluoro- (9CI) (CA INDEX NAME)



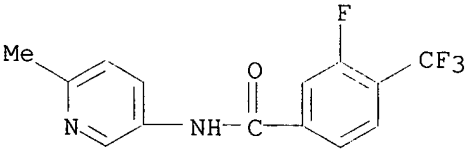
RN 325457-95-2 USPATFULL
CN Benzamide, N-(6-chloro-3-pyridinyl)-4-(trifluoromethyl)- (9CI) (CA INDEX NAME)



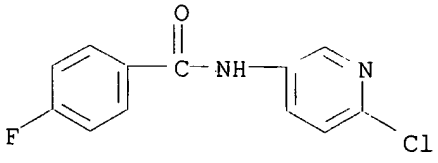
RN 325457-96-3 USPATFULL
CN Benzamide, N-(6-chloro-3-pyridinyl)-4-fluoro-3-(trifluoromethyl)- (9CI) (CA INDEX NAME)



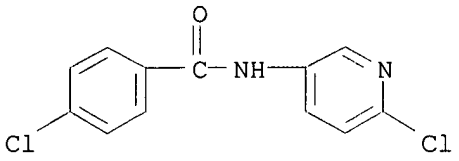
RN 325457-97-4 USPATFULL
CN Benzamide, 3-fluoro-N-(6-methyl-3-pyridinyl)-4-(trifluoromethyl)- (9CI) (CA INDEX NAME)



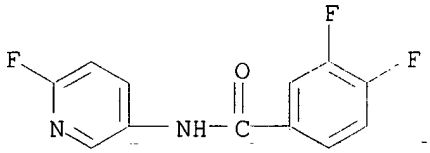
RN 325457-98-5 USPATFULL
CN Benzamide, N-(6-chloro-3-pyridinyl)-4-fluoro- (9CI) (CA INDEX NAME)



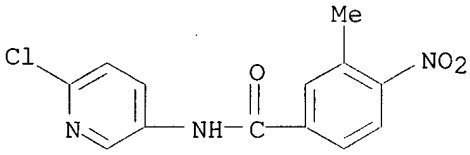
RN 325457-99-6 USPATFULL
CN Benzamide, 4-chloro-N-(6-chloro-3-pyridinyl)- (9CI) (CA INDEX NAME)



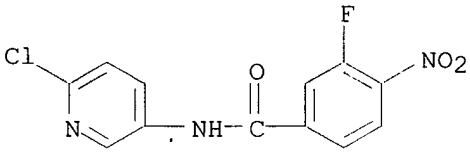
RN 325458-00-2 USPATFULL
CN Benzamide, 3,4-difluoro-N-(6-fluoro-3-pyridinyl)- (9CI) (CA INDEX NAME)



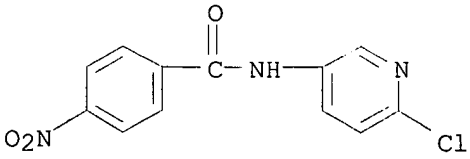
RN 325458-01-3 USPATFULL
CN Benzamide, N-(6-chloro-3-pyridinyl)-3-methyl-4-nitro- (9CI) (CA INDEX NAME)



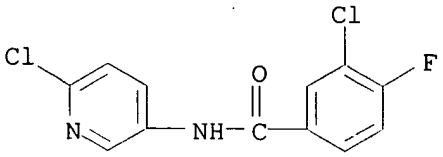
RN 325458-21-7 USPATFULL
CN Benzamide, N-(6-chloro-3-pyridinyl)-3-fluoro-4-nitro- (9CI) (CA INDEX NAME)



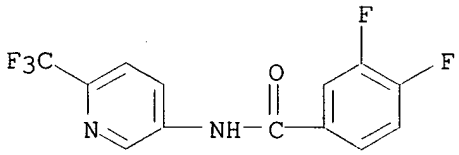
RN 325458-26-2 USPATFULL
CN Benzamide, N-(6-chloro-3-pyridinyl)-4-nitro- (9CI) (CA INDEX NAME)



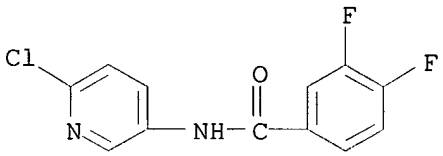
RN 325458-27-3 USPATFULL
CN Benzamide, 3-chloro-N-(6-chloro-3-pyridinyl)-4-fluoro- (9CI) (CA INDEX NAME)



RN 325458-32-0 USPATFULL
CN Benzamide, 3,4-difluoro-N-[6-(trifluoromethyl)-3-pyridinyl]- (9CI) (CA INDEX NAME)



IT **325457-89-4P**
(reaction; benzanilides as potassium channel openers, compns., and prepn.)
RN 325457-89-4 USPATFULL
CN Benzamide, N-(6-chloro-3-pyridinyl)-3,4-difluoro- (9CI) (CA INDEX NAME)



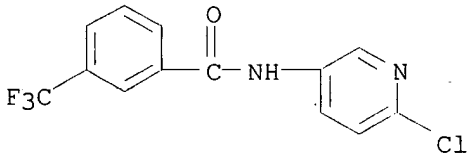
L82 ANSWER 15 OF 19 USPATFULL on STN
ACCESSION NUMBER: 2001:221063 USPATFULL
TITLE: Methods for treating or preventing pain
INVENTOR(S): Wickenden, Alan David, Cary, NC, United States
Rigdon, Gregory Cooksey, Durham, NC, United States
McNaughton-Smith, Grant Andrew, Morrisville, NC, United States
Gross, Michael Francis, Durham, NC, United States
PATENT ASSIGNEE(S): ICAgen, Inc., Durham, NC, United States (U.S. corporation)

	NUMBER	KIND	DATE
PATENT INFORMATION:	US 6326385	B1	20011204
APPLICATION INFO.:	US 2000-631747		20000804 (9)

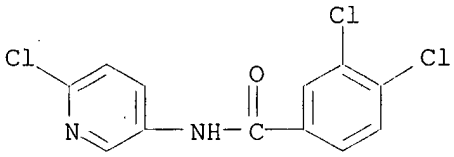
DOCUMENT TYPE: Utility
FILE SEGMENT: GRANTED
PRIMARY EXAMINER: Jarvis, William R. A.
LEGAL REPRESENTATIVE: Townsend and Townsend and Crew LLP, Parent, Annette S.
NUMBER OF CLAIMS: 31
EXEMPLARY CLAIM: 1
NUMBER OF DRAWINGS: 7 Drawing Figure(s); 12 Drawing Page(s)
LINE COUNT: 1520
CAS INDEXING IS AVAILABLE FOR THIS PATENT.
AB The present invention relates to a novel method of treating of pain,

using compounds that modulate KCNQ potassium channels and currents.

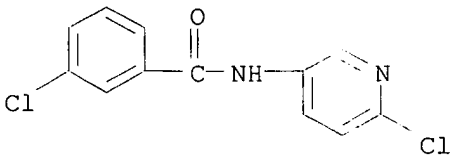
CAS INDEXING IS AVAILABLE FOR THIS PATENT.
IT **325457-87-2P 325457-88-3P 325457-90-7P**
325457-91-8P 325457-93-0P 325457-94-1P
325457-95-2P 325457-96-3P 325457-97-4P
325457-98-5P 325457-99-6P 325458-00-2P
325458-01-3P 325458-21-7P 325458-26-2P
325458-27-3P 325458-32-0P
(benzanilides as potassium channel openers, compns., and prepn.)
RN 325457-87-2 USPATFULL
CN Benzamide, N-(6-chloro-3-pyridinyl)-3-(trifluoromethyl)- (9CI) (CA INDEX NAME)



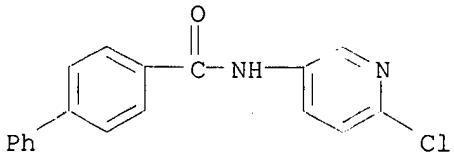
RN 325457-88-3 USPATFULL
CN Benzamide, 3,4-dichloro-N-(6-chloro-3-pyridinyl)- (9CI) (CA INDEX NAME)



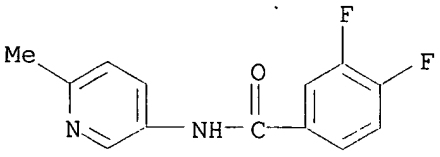
RN 325457-90-7 USPATFULL
CN Benzamide, 3-chloro-N-(6-chloro-3-pyridinyl)- (9CI) (CA INDEX NAME)



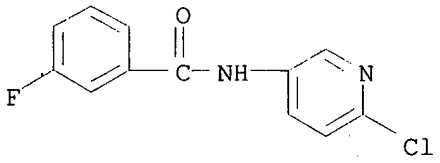
RN 325457-91-8 USPATFULL
CN [1,1'-Biphenyl]-4-carboxamide, N-(6-chloro-3-pyridinyl)- (9CI) (CA INDEX NAME)



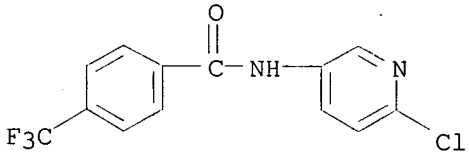
RN 325457-93-0 USPATFULL
CN Benzamide, 3,4-difluoro-N-(6-methyl-3-pyridinyl)- (9CI) (CA INDEX NAME)



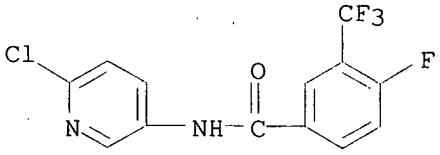
RN 325457-94-1 USPATFULL
CN Benzamide, N-(6-chloro-3-pyridinyl)-3-fluoro- (9CI) (CA INDEX NAME)



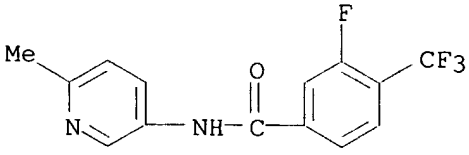
RN 325457-95-2 USPATFULL
CN Benzamide, N-(6-chloro-3-pyridinyl)-4-(trifluoromethyl)- (9CI) (CA INDEX NAME)



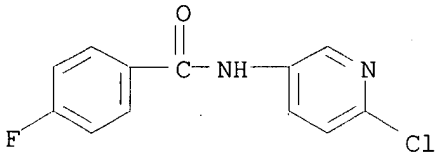
RN 325457-96-3 USPATFULL
CN Benzamide, N-(6-chloro-3-pyridinyl)-4-fluoro-3-(trifluoromethyl)- (9CI) (CA INDEX NAME)



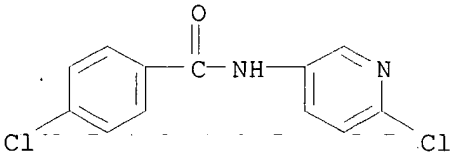
RN 325457-97-4 USPATFULL
CN Benzamide, 3-fluoro-N-(6-methyl-3-pyridinyl)-4-(trifluoromethyl)- (9CI) (CA INDEX NAME)



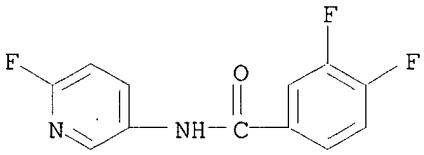
RN 325457-98-5 USPATFULL
CN Benzamide, N-(6-chloro-3-pyridinyl)-4-fluoro- (9CI) (CA INDEX NAME)



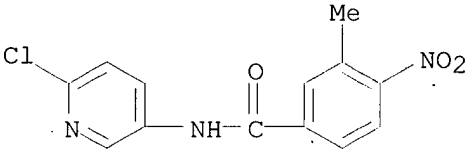
RN 325457-99-6 USPATFULL
CN Benzamide, 4-chloro-N-(6-chloro-3-pyridinyl)- (9CI) (CA INDEX NAME)



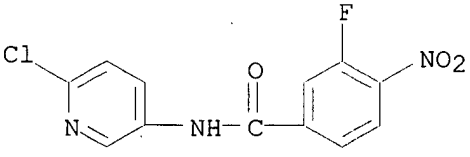
RN 325458-00-2 USPATFULL
CN Benzamide, 3,4-difluoro-N-(6-fluoro-3-pyridinyl)- (9CI) (CA INDEX NAME)



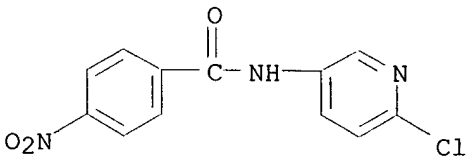
RN 325458-01-3 USPATFULL
CN Benzamide, N-(6-chloro-3-pyridinyl)-3-methyl-4-nitro- (9CI) (CA INDEX NAME)



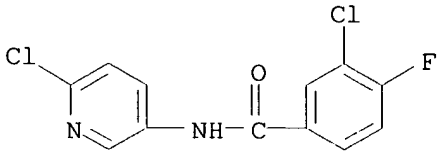
RN 325458-21-7 USPATFULL
CN Benzamide, N-(6-chloro-3-pyridinyl)-3-fluoro-4-nitro- (9CI) (CA INDEX NAME)



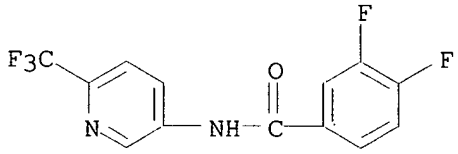
RN 325458-26-2 USPATFULL
CN Benzamide, N-(6-chloro-3-pyridinyl)-4-nitro- (9CI) (CA INDEX NAME)



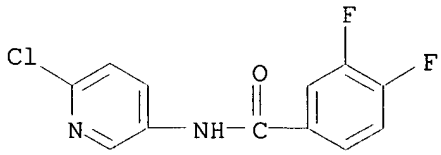
RN 325458-27-3 USPATFULL
CN Benzamide, 3-chloro-N-(6-chloro-3-pyridinyl)-4-fluoro- (9CI) (CA INDEX NAME)



RN 325458-32-0 USPATFULL
CN Benzamide, 3,4-difluoro-N-[6-(trifluoromethyl)-3-pyridinyl]- (9CI) (CA INDEX NAME)



IT **325457-89-4P**
(reaction; benzanilides as potassium channel openers, compns., and prepn.)
RN 325457-89-4 USPATFULL
CN Benzamide, N-(6-chloro-3-pyridinyl)-3,4-difluoro- (9CI) (CA INDEX NAME)



L82 ANSWER 16 OF 19 USPATFULL on STN
ACCESSION NUMBER: 1998:69063 USPATFULL
TITLE: Anti-osteopathic composition
INVENTOR(S): Shudo, Koichi, Tokyo, Japan
Sugioka, Tatsuo, Saitama, Japan
Inazu, Mizuho, Iruma, Japan
Tanaka, Hideyuki, Kawagoe, Japan
Inoue, Tsutomu, Hidaka, Japan
Kitamura, Kazuyuki, Sakado, Japan
PATENT ASSIGNEE(S): Hoechst Japan Limited, Tokyo, Japan (non-U.S. corporation)
Koichi Shudo, Tokyo, Japan (non-U.S. corporation)

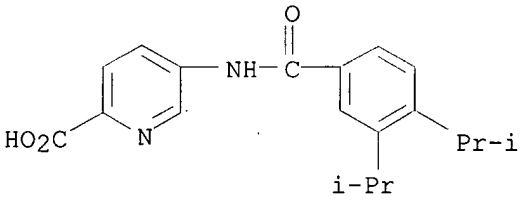
	NUMBER	KIND	DATE
PATENT INFORMATION:	US 5767146		19980616
APPLICATION INFO.:	US 1997-934899		19970922 (8)
RELATED APPLN. INFO.:	Division of Ser. No. US 1995-478850, filed on 7 Jun 1995, now patented, Pat. No. US 5716995 which is a division of Ser. No. US 1994-221600, filed on 1 Apr 1994, now patented, Pat. No. US 5525618		

	NUMBER	DATE
PRIORITY INFORMATION:	JP 1993-78320	19930405

DOCUMENT TYPE: Utility
FILE SEGMENT: Granted
PRIMARY EXAMINER: Criares, Theodore J.
LEGAL REPRESENTATIVE: Finnegan, Henderson, Farabow, Garrett & Dunner, L.L.P.
NUMBER OF CLAIMS: 3
EXEMPLARY CLAIM: 1
LINE COUNT: 536
CAS INDEXING IS AVAILABLE FOR THIS PATENT.

AB An anti-osteopathic composition comprising as an active ingredient a compound represented by the following formula (I), (II) or (Ill): ##STR1## which is useful for therapeutic and prophylactic treatment of osteopathia such as osteoporosis and bone fracture.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.
IT **161069-97-2**
(prepn. and use of arom. carboxylic acids for osteopathy treatment)
RN 161069-97-2 USPATFULL
CN 2-Pyridinecarboxylic acid, 5-[[3,4-bis(1-methylethyl)benzoyl]amino]- (9CI) (CA INDEX NAME)



L82 ANSWER 17 OF 19 USPATFULL on STN
ACCESSION NUMBER: 1998:14842 USPATFULL
TITLE: Anti-osteopathic composition
INVENTOR(S): Shudo, Koichi, Tokyo, Japan
Sugioka, Tatsuo, Iruma-gun, Japan
Inazu, Mizuho, Iruma, Japan
Tanaka, Hideyuki, Kawagoe, Japan
Inoue, Tsutomu, Hidaka, Japan
Kitamura, Kazuyuki, Sakado, Japan
PATENT ASSIGNEE(S): Hoechst Japan Limited, Tokyo, Japan (non-U.S. corporation)
Koichi Shudo, Tokyo, Japan (non-U.S. corporation)

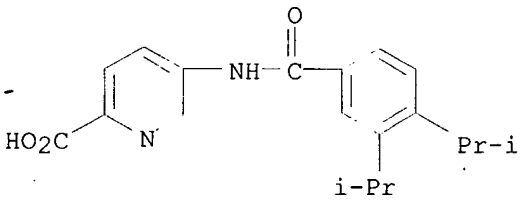
	NUMBER	KIND	DATE
PATENT INFORMATION:	US 5716995		19980210
APPLICATION INFO.:	US 1995-478850		19950607 (8)
RELATED APPLN. INFO.:	Division of Ser. No. US 1994-221600, filed on 1 Apr 1994, now patented, Pat. No. US 5525618		

	NUMBER	DATE
PRIORITY INFORMATION:	JP 1993-78320	19930405

DOCUMENT TYPE: Utility
FILE SEGMENT: Granted
PRIMARY EXAMINER: Criares, Theodore J.
LEGAL REPRESENTATIVE: Finnegan, Henderson, Farabow, Garrett & Dunner, L.L.P.
NUMBER OF CLAIMS: 3
EXEMPLARY CLAIM: 1
LINE COUNT: 550
CAS INDEXING IS AVAILABLE FOR THIS PATENT.

AB An anti-osteopathic composition comprising as an active ingredient a compound represented by the following formula (I), (II) or (III): ##STR1## which is useful for therapeutic and prophylactic treatment of osteopathia such as osteoporosis and bone fracture.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.
IT **161069-97-2**
(prepn. and use of arom. carboxylic acids for osteopathy treatment)
RN 161069-97-2 USPATFULL
CN 2-Pyridinecarboxylic acid, 5-[[3,4-bis(1-methylethyl)benzoyl]amino]- (9CI) (CA INDEX NAME)



L82 ANSWER 18 OF 19 USPATFULL on STN
ACCESSION NUMBER: 97:123263 USPATFULL
TITLE: Anti-osteopathic composition
INVENTOR(S): Shudo, Koichi, Tokyo, Japan
Sugioka, Tatsuo, Iruma-gun, Japan
Inazu, Mizuho, Iruma, Japan
Tanaka, Hideyuki, Kawagoe, Japan
Inoue, Tsutomu, Hidaka, Japan
Kitamura, Kazuyuki, Sakado, Japan
PATENT ASSIGNEE(S): Hoechst Japan Limited, Tokyo, Japan (non-U.S. corporation)
Koichi Shudo, Tokyo, Japan (non-U.S. corporation)

	NUMBER	KIND	DATE
PATENT INFORMATION:	US 5703128		19971230
APPLICATION INFO.:	US 1996-613265		19960308 (8)

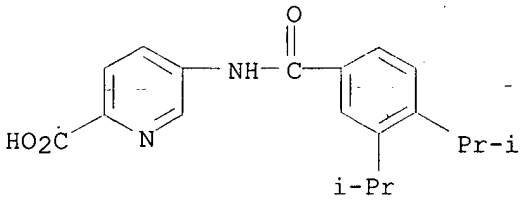
RELATED APPLN. INFO.: Division of Ser. No. US 1994-221600, filed on 1 Apr 1994, now patented, Pat. No. US 5525618

	NUMBER	DATE
PRIORITY INFORMATION:	JP 1993-78320	19930405

DOCUMENT TYPE: Utility
FILE SEGMENT: Granted
PRIMARY EXAMINER: Criares, Theodore J.
LEGAL REPRESENTATIVE: Finnegan, Henderson, Farabow, Garrett & Dunner, L.L.P.
NUMBER OF CLAIMS: 2
EXEMPLARY CLAIM: 1

LINE COUNT: 535
CAS INDEXING IS AVAILABLE FOR THIS PATENT.
AB An anti-osteopathic composition comprising as an active ingredient a compound represented by the following formula (I), (II) or (III): ##STR1## which is useful for therapeutic and prophylactic treatment of osteopathia such as osteoporosis and bone fracture.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.
IT **161069-97-2**
(prepn. and use of arom. carboxylic acids for osteopathy treatment)
RN 161069-97-2 USPATFULL
CN 2-Pyridinecarboxylic acid, 5-[[3,4-bis(1-methylethyl)benzoyl]amino]- (9CI) (CA INDEX NAME)



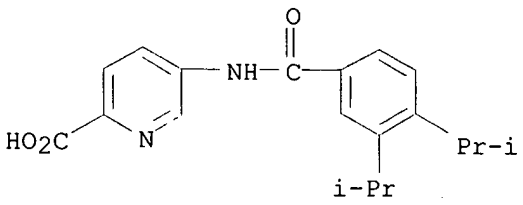
L82 ANSWER 19 OF 19 USPATFULL on STN
ACCESSION NUMBER: 96:50915 USPATFULL
TITLE: Method of treating bone disease with pyridine, carboxamide and carboxylic derivatives
INVENTOR(S): Shudo, Koichi, Tokyo, Japan
Sugioka, Tatsuo, Saitama, Japan
Inazu, Mizuho, Iruma, Japan
Tanaka, Hideyuki, Kawagoe, Japan
Inoue, Tsutomu, Hidaka, Japan
Kitamura, Kazuyuki, Sakado, Japan
PATENT ASSIGNEE(S): Hoechst Japan Limited, Japan (non-U.S. corporation)

	NUMBER	KIND	DATE	
PATENT INFORMATION:	US 5525618		19960611	
APPLICATION INFO.:	US 1994-221600		19940401	(8)

	NUMBER	DATE
PRIORITY INFORMATION:	JP 1993-78320	19930405

DOCUMENT TYPE: Utility
FILE SEGMENT: Granted
PRIMARY EXAMINER: Criares, Theodore J.
LEGAL REPRESENTATIVE: Finnegan, Henderson, Farabow, Garrett & Dunner
NUMBER OF CLAIMS: 1
EXEMPLARY CLAIM: 1
LINE COUNT: 531
CAS INDEXING IS AVAILABLE FOR THIS PATENT.
AB Treatment of osteopathic comprising administering as an active ingredient a compound represented by the following formula (I), (II) or (III): ##STR1##

CAS INDEXING IS AVAILABLE FOR THIS PATENT.
IT **161069-97-2**
(prepn. and use of arom. carboxylic acids for osteopathy treatment)
RN 161069-97-2 USPATFULL
CN 2-Pyridinecarboxylic acid, 5-[[3,4-bis(1-methylethyl)benzoyl]amino]- (9CI) (CA INDEX NAME)



FILE 'CAOLD' ENTERED AT 12:10:13 ON 04 SEP 2003
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FILE COVERS 1907-1966
FILE LAST UPDATED: 01 May 1997 (19970501/UP)

This file contains CAS Registry Numbers for easy and accurate substance identification. Title keywords, authors, patent assignees, and patent information, e.g., patent numbers, are now searchable from 1907-1966. TIFF images of CA abstracts printed between 1907-1966 are available in the PAGE display formats.

This file supports REG1stRY for direct browsing and searching of all substance data from the REGISTRY file. Enter HELP FIRST for more information.

L76		STR
L78	41	SEA FILE=REGISTRY SSS FUL L76
L81	0	SEA FILE=CAOLD ABB=ON L78

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=> fil reg; d stat que l131
FILE 'REGISTRY' ENTERED AT 13:18:29 ON 04 SEP 2003
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Property values tagged with IC are from the ZIC/VINITI data file
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STRUCTURE FILE UPDATES:    2 SEP 2003  HIGHEST RN 577952-45-5
DICTIONARY FILE UPDATES:   2 SEP 2003  HIGHEST RN 577952-45-5

TSCA INFORMATION NOW CURRENT THROUGH JANUARY 6, 2003

  Please note that search-term pricing does apply when
  conducting SmartSELECT searches.

Crossover limits have been increased.  See HELP CROSSOVER for details.

Experimental and calculated property data are now available.  See HELP
PROPERTIES for more information.  See STNote 27, Searching Properties
in the CAS Registry File, for complete details:
http://www.cas.org/ONLINE/STN/STNOTES/stnotes27.pdf

L129              STR
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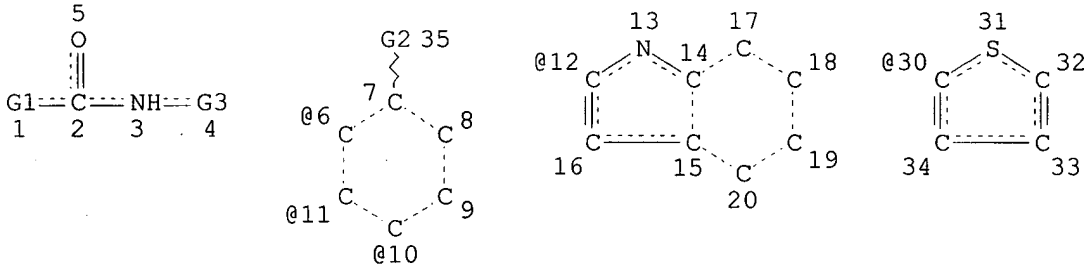

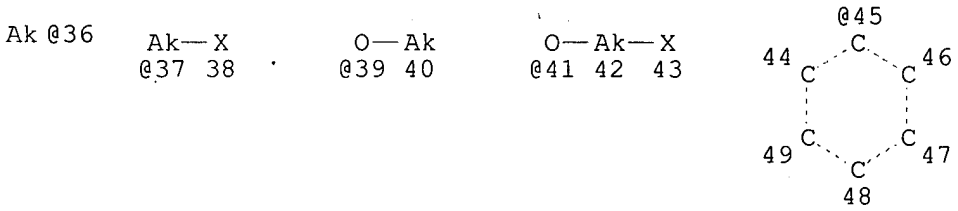

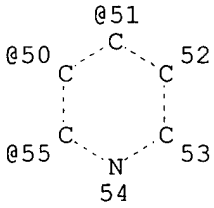


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VAR G2=X/36/37/39/41/NO2/CN/NH/45
VAR G3=51/50/55
NODE ATTRIBUTES:
CONNECT IS E1  RC AT  36
CONNECT IS E1  RC AT  40
DEFAULT MLEVEL IS ATOM
DEFAULT ECLEVEL IS LIMITED
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GRAPH ATTRIBUTES:
RSPEC I
NUMBER OF NODES IS  46

STEREO ATTRIBUTES: NONE
L131       8268 SEA FILE=REGISTRY SSS FUL L129

100.0% PROCESSED  63885 ITERATIONS                      8268 ANSWERS
SEARCH TIME: 00.00.02


=> fil capl; d que nos l134; d que nos l135

FILE 'CAPLUS' ENTERED AT 13:18:31 ON 04 SEP 2003
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FILE COVERS 1907 - 4 Sep 2003  VOL 139 ISS 10
FILE LAST UPDATED: 2 Sep 2003  (20030902/ED)

  This file contains CAS Registry Numbers for easy and accurate
  substance identification.


L4          5087 SEA FILE=CAPLUS ABB=ON  ANXIETY/CT
L5          4603 SEA FILE=CAPLUS ABB=ON  ANXIOLYTICS/CT
L6           422 SEA FILE=CAPLUS ABB=ON  ANTIANXIETY/OBI
L7          3540 SEA FILE=CAPLUS ABB=ON  (NERVOUSNESS OR PANIC OR PHOBI## OR
                 AGORAPHOBI? OR NEUROCIRCULATORY ASTHENI? OR OBSESSI?(A)COMPULSI
                 ? OR (COMBAT OR STRESS)(L)DISORDER#)/OBI
L129             STR
L131        8268 SEA FILE=REGISTRY SSS FUL L129
L133         866 SEA FILE=CAPLUS ABB=ON  L131
L134           6 SEA FILE=CAPLUS ABB=ON  (L4 OR L5 OR L6 OR L7) AND L133



L8         21769 SEA FILE=CAPLUS ABB=ON  POTASSIUM(L)CHANNEL#/OBI
L9           310 SEA FILE=CAPLUS ABB=ON  KCNQ#
L129             STR
L131        8268 SEA FILE=REGISTRY SSS FUL L129
L133         866 SEA FILE=CAPLUS ABB=ON  L131
L135           6 SEA FILE=CAPLUS ABB=ON  (L8 OR L9) AND L133


=> s l134 or l135

L151        12 L134 OR L135
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=> fil uspatf; d que nos l139; d que nos l140;d que nos l141; d que nos l142

FILE 'USPATFULL' ENTERED AT 13:18:33 ON 04 SEP 2003
CA INDEXING COPYRIGHT (C) 2003 AMERICAN CHEMICAL SOCIETY (ACS)

FILE COVERS 1971 TO PATENT PUBLICATION DATE: 2 Sep 2003 (20030902/PD)
FILE LAST UPDATED: 2 Sep 2003 (20030902/ED)
HIGHEST GRANTED PATENT NUMBER: US6615408
HIGHEST APPLICATION PUBLICATION NUMBER: US2003163860
CA INDEXING IS CURRENT THROUGH 2 Sep 2003 (20030902/UPCA)
ISSUE CLASS FIELDS (/INCL) CURRENT THROUGH: 2 Sep 2003 (20030902/PD)
REVISED CLASS FIELDS (/NCL) LAST RELOADED: Jun 2003
USPTO MANUAL OF CLASSIFICATIONS THESAURUS ISSUE DATE: Jun 2003

>>>  USPAT2 is now available.  USPATFULL contains full text of the     <<<
>>>  original, i.e., the earliest published granted patents or         <<<
>>>  applications.  USPAT2 contains full text of the latest US         <<<
>>>  publications, starting in 2001, for the inventions covered in     <<<
>>>  USPATFULL.  A USPATFULL record contains not only the original     <<<
>>>  published document but also a list of any subsequent              <<<
>>>  publications.  The publication number, patent kind code, and      <<<
>>>  publication date for all the US publications for an invention     <<<
>>>  are displayed in the PI (Patent Information) field of USPATFULL   <<<
>>>  records and may be searched in standard search fields, e.g., /PN, <<<
>>>  /PK, etc.                                                         <<<

>>>  USPATFULL and USPAT2 can be accessed and searched together        <<<
>>>  through the new cluster USPATALL.  Type FILE USPATALL to          <<<
>>>  enter this cluster.                                               <<<
>>>                                                                    <<<
>>>  Use USPATALL when searching terms such as patent assignees,       <<<
>>>  classifications, or claims, that may potentially change from      <<<
>>>  the earliest to the latest publication.                           <<<

This file contains CAS Registry Numbers for easy and accurate
substance identification.


L100         843 SEA FILE=USPATFULL ABB=ON  (POTASSIUM(3A)CHANNEL#)/IT,TI,AB,CLM

L101          22 SEA FILE=USPATFULL ABB=ON  KCNQ#/IT,TI,AB,CLM
L102        2724 SEA FILE=USPATFULL ABB=ON  ANXIETY/CT OR (ANXIOLYTIC? OR
                 ANTIANXIETY)/IT,TI,AB,CLM
L103        1305 SEA FILE=USPATFULL ABB=ON  (DISTRESS SYNDROME# OR KORO OR
                 PSYCHASTHENI?)/IT,TI,AB,CLM
L104         291 SEA FILE=USPATFULL ABB=ON  ((COMBAT OR STRESS)(W)DISORDER#)/IT,
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L105         585 SEA FILE=USPATFULL ABB=ON  ((OBSESSI?(A)COMPULSI?))/IT,TI,AB,CL
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L106        1141 SEA FILE=USPATFULL ABB=ON  (NERVOUSNESS OR PANIC OR PHOBI## OR
                 AGORAPHOBI? OR NEUROCIRCULATORY ASTHENI?)/IT,TI,AB,CLM
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L131        8268 SEA FILE=REGISTRY SSS FUL L129
L132        3708 SEA FILE=REGISTRY ABB=ON  L131 AND USPATFULL/LC
L137         346 SEA FILE=USPATFULL ABB=ON  L132
L139           1 SEA FILE=USPATFULL ABB=ON  (L100 OR L101) AND (L102 OR L103 OR
                 L104 OR L105 OR L106) AND L137



L100         843 SEA FILE=USPATFULL ABB=ON  (POTASSIUM(3A)CHANNEL#)/IT,TI,AB,CLM
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L129             STR
L131        8268 SEA FILE=REGISTRY SSS FUL L129
L132        3708 SEA FILE=REGISTRY ABB=ON  L131 AND USPATFULL/LC
L137         346 SEA FILE=USPATFULL ABB=ON  L132
L140           5 SEA FILE=USPATFULL ABB=ON  L100 AND L101 AND L137



L102        2724 SEA FILE=USPATFULL ABB=ON  ANXIETY/CT OR (ANXIOLYTIC? OR
                 ANTIANXIETY)/IT,TI,AB,CLM
L103        1305 SEA FILE=USPATFULL ABB=ON  (DISTRESS SYNDROME# OR KORO OR
                 PSYCHASTHENI?)/IT,TI,AB,CLM
L104         291 SEA FILE=USPATFULL ABB=ON  ((COMBAT OR STRESS)(W)DISORDER#)/IT,
                 TI,AB,CLM
L105         585 SEA FILE=USPATFULL ABB=ON  ((OBSESSI?(A)COMPULSI?))/IT,TI,AB,CL
                 M
L106        1141 SEA FILE=USPATFULL ABB=ON  (NERVOUSNESS OR PANIC OR PHOBI## OR
                 AGORAPHOBI? OR NEUROCIRCULATORY ASTHENI?)/IT,TI,AB,CLM
L129             STR
L131        8268 SEA FILE=REGISTRY SSS FUL L129
L132        3708 SEA FILE=REGISTRY ABB=ON  L131 AND USPATFULL/LC
L137         346 SEA FILE=USPATFULL ABB=ON  L132
L141           3 SEA FILE=USPATFULL ABB=ON  L137(L)(L102 OR L103 OR L104 OR
                 L105 OR L106)



L110         727 SEA FILE=USPATFULL ABB=ON  ANXIETY/CT
L129             STR
L131        8268 SEA FILE=REGISTRY SSS FUL L129
L132        3708 SEA FILE=REGISTRY ABB=ON  L131 AND USPATFULL/LC
L137         346 SEA FILE=USPATFULL ABB=ON  L132
L142           1 SEA FILE=USPATFULL ABB=ON  L110 AND L137


=> s l139-l142

L152           9 (L139 OR L140 OR L141 OR L142)

=> dup rem l152,l151
FILE 'USPATFULL' ENTERED AT 13:18:43 ON 04 SEP 2003
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PROCESSING COMPLETED FOR L152
PROCESSING COMPLETED FOR L151
L153          20 DUP REM L152 L151 (1 DUPLICATE REMOVED)
                 ANSWERS '1-9' FROM FILE USPATFULL
                 ANSWERS '10-20' FROM FILE CAPLUS

=> d ibib abs hitstr 1-20; fil cao; d que nos l150; fil hom

L153 ANSWER 1 OF 20  USPATFULL on STN                    DUPLICATE 1
ACCESSION NUMBER:        2001:224227  USPATFULL
TITLE:                   Pyridine-substituted benzanilides as potassium
                         ion channel openers
INVENTOR(S):             McNaughton-Smith, Grant, Morrisville, NC, United States
                         Fritch, Paul Christopher, Durham, NC, United States
                         Amato, George Salvatore, Cary, NC, United States
```

	NUMBER	KIND	DATE
PATENT INFORMATION:	US 2001049444	A1	20011206
	US 6495550	B2	20021217
APPLICATION INFO.:	US 2001-776791	A1	20010202 (9)

RELATED APPLN. INFO.: Continuation-in-part of Ser. No. US 2000-632576, filed on 4 Aug 2000, PENDING

	NUMBER	DATE
PRIORITY INFORMATION:	US 1999-147221P	19990804 (60)

DOCUMENT TYPE: Utility
FILE SEGMENT: APPLICATION
LEGAL REPRESENTATIVE: TOWNSEND AND TOWNSEND AND CREW, TWO EMBARCADERO CENTER, EIGHTH FLOOR, SAN FRANCISCO, CA, 94111-3834
NUMBER OF CLAIMS: 23
EXEMPLARY CLAIM: 1
NUMBER OF DRAWINGS: 11 Drawing Page(s)
LINE COUNT: 2147
CAS INDEXING IS AVAILABLE FOR THIS PATENT.

AB The present invention provides a genus of pyridine-substituted benzanilides that are useful as openers of **potassium** ion **channels**. The compounds of the invention are of use in both therapeutic and diagnostic methods.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

IT **304885-01-6P 325457-87-2P 325457-88-3P**
325457-89-4P 325457-90-7P 325457-91-8P
325457-93-0P 325457-94-1P 325457-95-2P
325457-96-3P 325457-97-4P 325457-98-5P
325457-99-6P 325458-00-2P 325458-01-3P
325458-02-4P 325458-03-5P 325458-05-7P
325458-08-0P 325458-09-1P 325458-11-5P
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325458-16-0P 325458-17-1P 325458-18-2P
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325458-23-9P 325458-25-1P 325458-26-2P
325458-27-3P 325458-32-0P 378241-06-6P
378241-08-8P 378241-09-9P 378241-10-2P
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378241-20-4P 378241-21-5P 378241-22-6P
378241-23-7P 378241-24-8P 378241-25-9P
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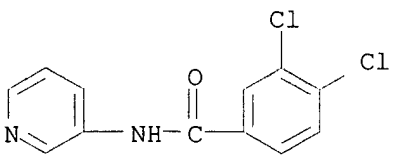
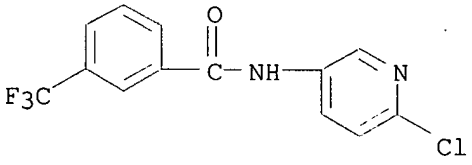
378241-29-3P 378241-31-7P 378241-32-8P
378241-33-9P 378241-34-0P 378241-35-1P
378241-36-2P 378241-37-3P
(prepn. of benzanilides as **potassium channel** openers)

RN 304885-01-6 USPATFULL
CN Benzamide, 3,4-dichloro-N-3-pyridinyl- (9CI) (CA INDEX NAME)



RN 325457-87-2 USPATFULL
CN Benzamide, N-(6-chloro-3-pyridinyl)-3-(trifluoromethyl)- (9CI) (CA INDEX NAME)



RN 325457-88-3 USPATFULL
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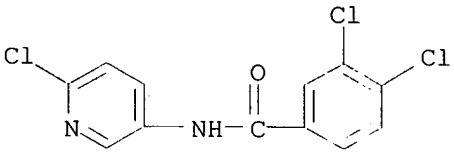

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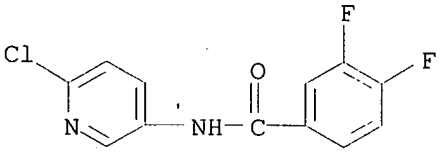

RN 325457-90-7 USPATFULL
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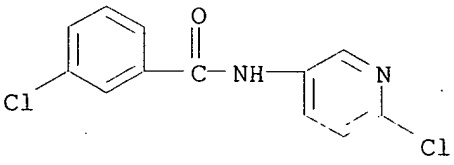

RN 325457-91-8 USPATFULL
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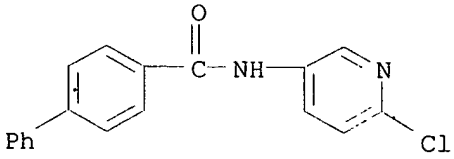

RN 325457-93-0 USPATFULL

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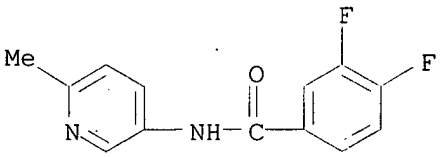

RN 325457-94-1 USPATFULL
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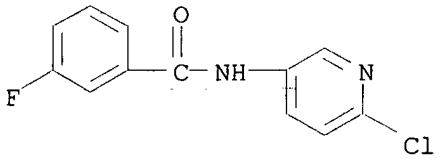

RN 325457-95-2 USPATFULL
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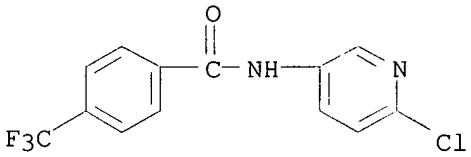
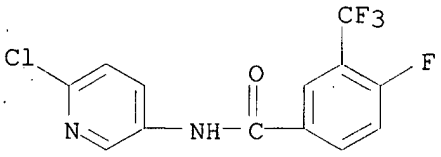
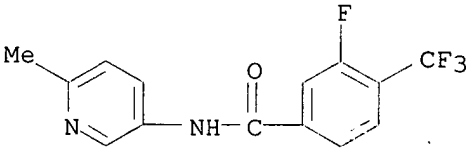


RN 325457-96-3 USPATFULL
CN Benzamide, N-(6-chloro-3-pyridinyl)-4-fluoro-3-(trifluoromethyl)- (9CI) (CA INDEX NAME)

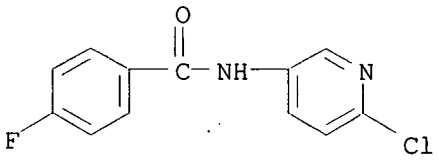


RN 325457-97-4 USPATFULL
CN Benzamide, 3-fluoro-N-(6-methyl-3-pyridinyl)-4-(trifluoromethyl)- (9CI) (CA INDEX NAME)

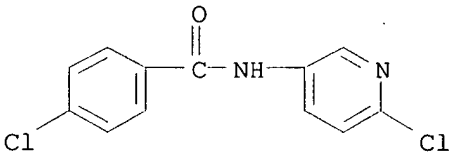


RN 325457-98-5 USPATFULL

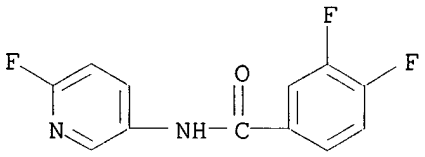
CN Benzamide, N-(6-chloro-3-pyridinyl)-4-fluoro- (9CI) (CA INDEX NAME)



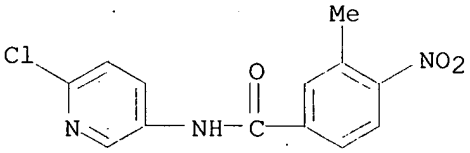
RN 325457-99-6 USPATFULL
CN Benzamide, 4-chloro-N-(6-chloro-3-pyridinyl)- (9CI) (CA INDEX NAME)



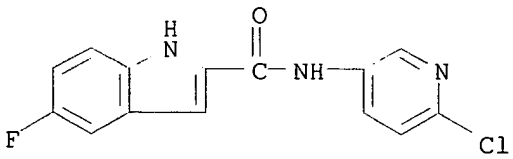
RN 325458-00-2 USPATFULL
CN Benzamide, 3,4-difluoro-N-(6-fluoro-3-pyridinyl)- (9CI) (CA INDEX NAME)



RN 325458-01-3 USPATFULL
CN Benzamide, N-(6-chloro-3-pyridinyl)-3-methyl-4-nitro- (9CI) (CA INDEX NAME)

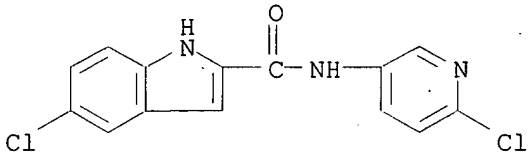


RN 325458-02-4 USPATFULL
CN 1H-Indole-2-carboxamide, N-(6-chloro-3-pyridinyl)-5-fluoro- (9CI) (CA INDEX NAME)

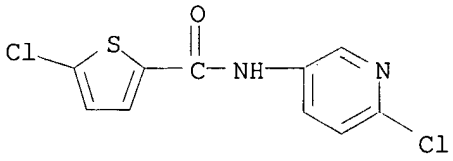


RN 325458-03-5 USPATFULL
CN 1H-Indole-2-carboxamide, 5-chloro-N-(6-chloro-3-pyridinyl)- (9CI) (CA

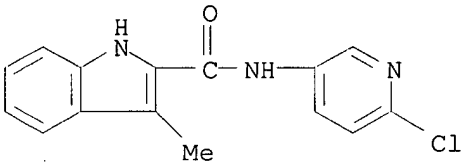
INDEX NAME)



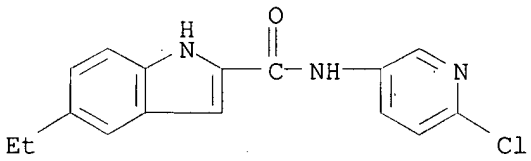
RN 325458-05-7 USPATFULL
CN 2-Thiophenecarboxamide, 5-chloro-N-(6-chloro-3-pyridinyl)- (9CI) (CA INDEX NAME)



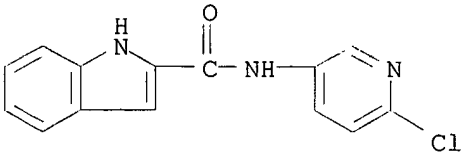
RN 325458-08-0 USPATFULL
CN 1H-Indole-2-carboxamide, N-(6-chloro-3-pyridinyl)-3-methyl- (9CI) (CA INDEX NAME)



RN 325458-09-1 USPATFULL
CN 1H-Indole-2-carboxamide, N-(6-chloro-3-pyridinyl)-5-ethyl- (9CI) (CA INDEX NAME)

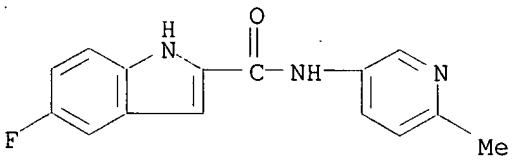


RN 325458-11-5 USPATFULL
CN 1H-Indole-2-carboxamide, N-(6-chloro-3-pyridinyl)- (9CI) (CA INDEX NAME)

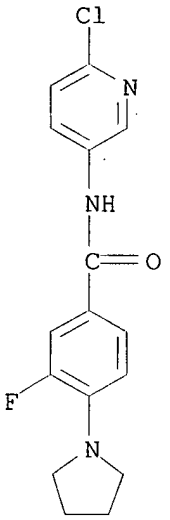


RN 325458-13-7 USPATFULL

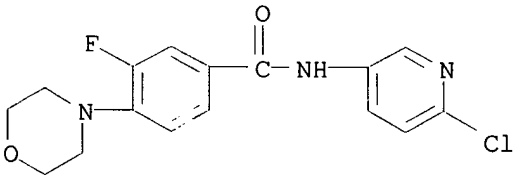
CN 1H-Indole-2-carboxamide, 5-fluoro-N-(6-methyl-3-pyridinyl)- (9CI) (CA INDEX NAME)



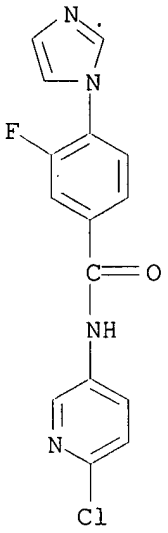
RN 325458-14-8 USPATFULL
CN Benzamide, N-(6-chloro-3-pyridinyl)-3-fluoro-4-(1-pyrrolidinyl)- (9CI) (CA INDEX NAME)



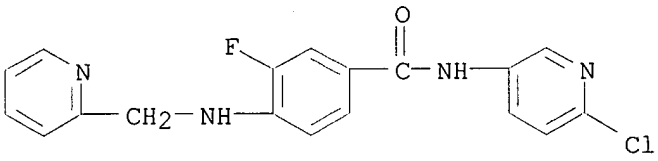
RN 325458-15-9 USPATFULL
CN Benzamide, N-(6-chloro-3-pyridinyl)-3-fluoro-4-(4-morpholinyl)- (9CI) (CA INDEX NAME)



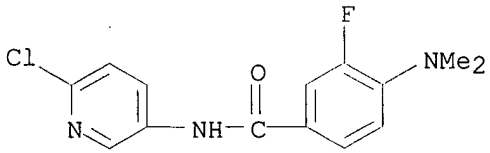
RN 325458-16-0 USPATFULL
CN Benzamide, N-(6-chloro-3-pyridinyl)-3-fluoro-4-(1H-imidazol-1-yl)- (9CI) (CA INDEX NAME)



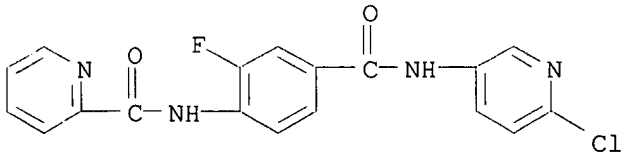
RN 325458-17-1 USPATFULL
CN Benzamide, N-(6-chloro-3-pyridinyl)-3-fluoro-4-[(2-pyridinylmethyl)amino]- (9CI) (CA INDEX NAME)



RN 325458-18-2 USPATFULL
CN Benzamide, N-(6-chloro-3-pyridinyl)-4-(dimethylamino)-3-fluoro- (9CI) (CA INDEX NAME)

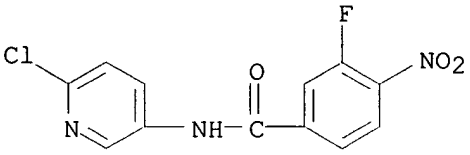


RN 325458-19-3 USPATFULL
CN 2-Pyridinecarboxamide, N-[4-[[(6-chloro-3-pyridinyl)amino]carbonyl]-2-fluorophenyl]- (9CI) (CA INDEX NAME)

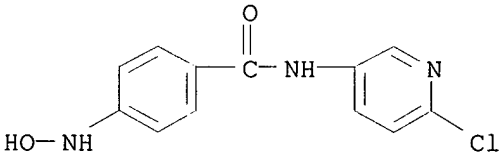


RN 325458-21-7 USPATFULL
CN Benzamide, N-(6-chloro-3-pyridinyl)-3-fluoro-4-nitro- (9CI) (CA INDEX

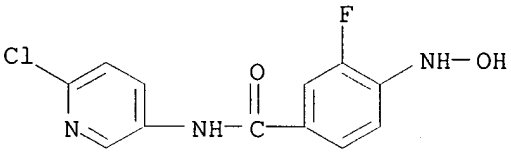
NAME)



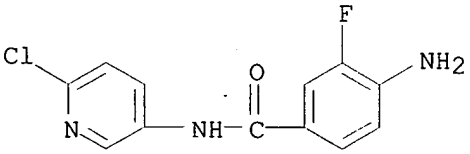
RN 325458-22-8 USPATFULL
CN Benzamide, N-(6-chloro-3-pyridinyl)-4-(hydroxyamino)- (9CI) (CA INDEX NAME)



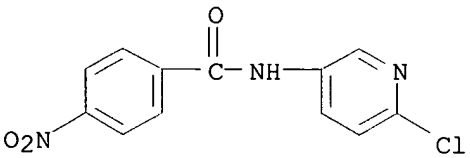
RN 325458-23-9 USPATFULL
CN Benzamide, N-(6-chloro-3-pyridinyl)-3-fluoro-4-(hydroxyamino)- (9CI) (CA INDEX NAME)



RN 325458-25-1 USPATFULL
CN Benzamide, 4-amino-N-(6-chloro-3-pyridinyl)-3-fluoro- (9CI) (CA INDEX NAME)

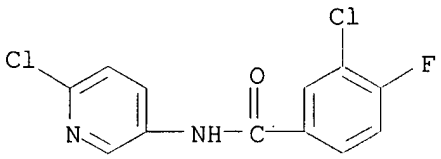


RN 325458-26-2 USPATFULL
CN Benzamide, N-(6-chloro-3-pyridinyl)-4-nitro- (9CI) (CA INDEX NAME)

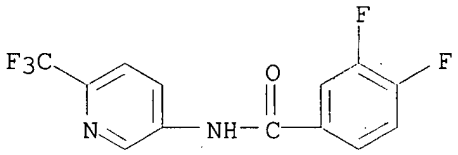


RN 325458-27-3 USPATFULL

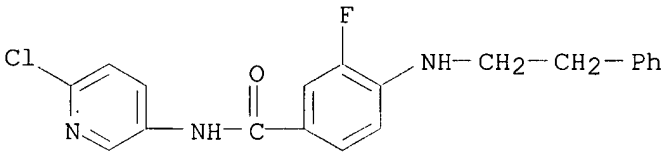
CN Benzamide, 3-chloro-N-(6-chloro-3-pyridinyl)-4-fluoro- (9CI) (CA INDEX NAME)



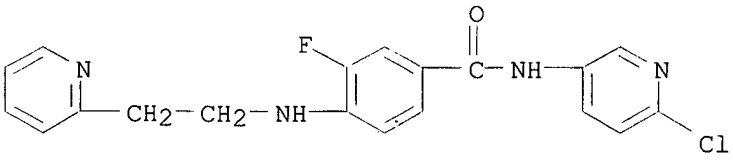
RN 325458-32-0 USPATFULL
CN Benzamide, 3,4-difluoro-N-[6-(trifluoromethyl)-3-pyridinyl]- (9CI) (CA INDEX NAME)



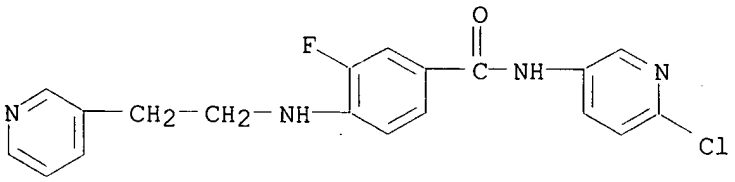
RN 378241-06-6 USPATFULL
CN Benzamide, N-(6-chloro-3-pyridinyl)-3-fluoro-4-[(2-phenylethyl)amino]- (9CI) (CA INDEX NAME)



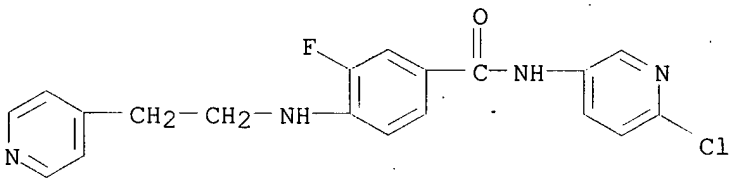
RN 378241-08-8 USPATFULL
CN Benzamide, N-(6-chloro-3-pyridinyl)-3-fluoro-4-[[2-(2-pyridinyl)ethyl]amino]- (9CI) (CA INDEX NAME)



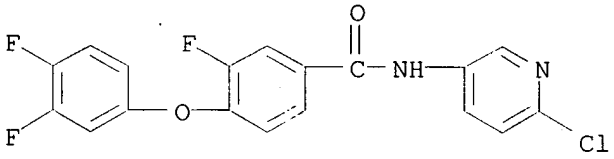
RN 378241-09-9 USPATFULL
CN Benzamide, N-(6-chloro-3-pyridinyl)-3-fluoro-4-[[2-(3-pyridinyl)ethyl]amino]- (9CI) (CA INDEX NAME)



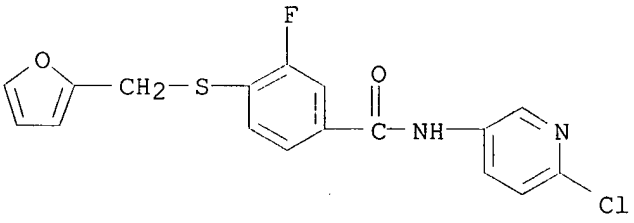
RN 378241-10-2 USPATFULL
CN Benzamide, N-(6-chloro-3-pyridinyl)-3-fluoro-4-[[2-(4-pyridinyl)ethyl]amino]- (9CI) (CA INDEX NAME)



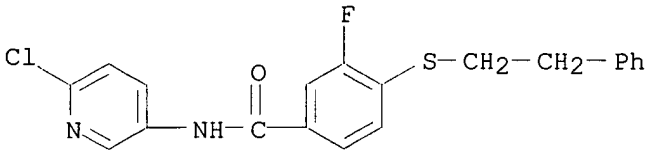
RN 378241-11-3 USPATFULL
CN Benzamide, N-(6-chloro-3-pyridinyl)-4-(3,4-difluorophenoxy)-3-fluoro- (9CI) (CA INDEX NAME)



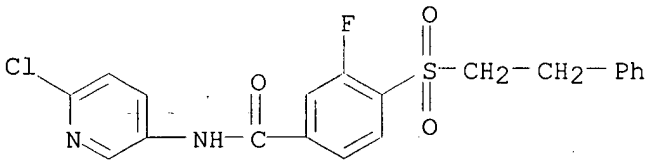
RN 378241-12-4 USPATFULL
CN Benzamide, N-(6-chloro-3-pyridinyl)-3-fluoro-4-[(2-furanylmethyl)thio]- (9CI) (CA INDEX NAME)



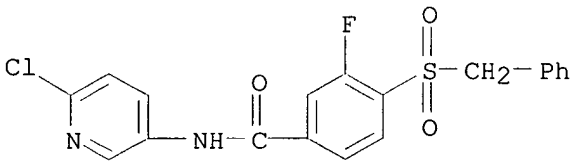
RN 378241-13-5 USPATFULL
CN Benzamide, N-(6-chloro-3-pyridinyl)-3-fluoro-4-[(2-phenylethyl)thio]- (9CI) (CA INDEX NAME)



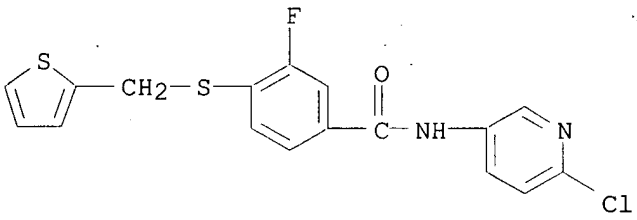
RN 378241-14-6 USPATFULL
CN Benzamide, N-(6-chloro-3-pyridinyl)-3-fluoro-4-[(2-phenylethyl)sulfonyl]- (9CI) (CA INDEX NAME)



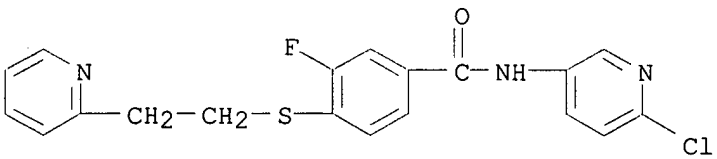
RN 378241-15-7 USPATFULL
CN Benzamide, N-(6-chloro-3-pyridinyl)-3-fluoro-4-[(phenylmethyl)sulfonyl]- (9CI) (CA INDEX NAME)



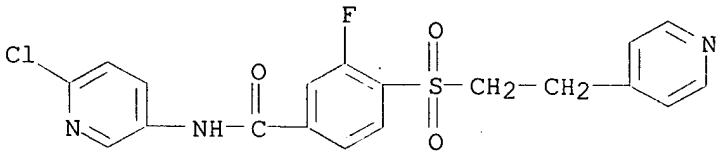
RN 378241-16-8 USPATFULL
CN Benzamide, N-(6-chloro-3-pyridinyl)-3-fluoro-4-[(2-thienylmethyl)thio]- (9CI) (CA INDEX NAME)



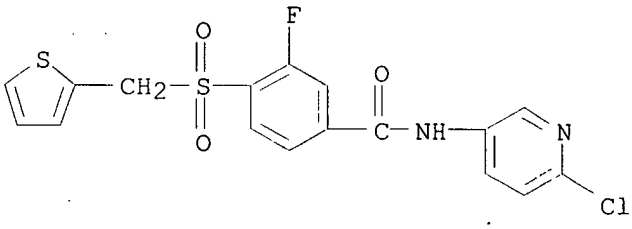
RN 378241-17-9 USPATFULL
CN Benzamide, N-(6-chloro-3-pyridinyl)-3-fluoro-4-[[2-(2-pyridinyl)ethyl]thio]- (9CI) (CA INDEX NAME)



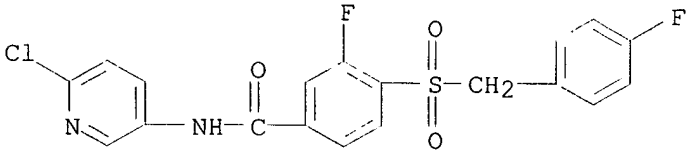
RN 378241-18-0 USPATFULL
CN Benzamide, N-(6-chloro-3-pyridinyl)-3-fluoro-4-[[2-(4-pyridinyl)ethyl]sulfonyl]- (9CI) (CA INDEX NAME)



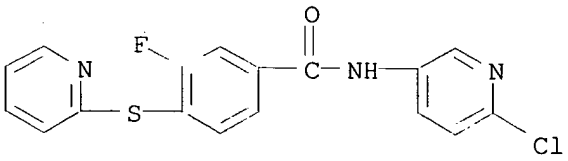
RN 378241-19-1 USPATFULL
CN Benzamide, N-(6-chloro-3-pyridinyl)-3-fluoro-4-[(2-thienylmethyl)sulfonyl]- (9CI) (CA INDEX NAME)



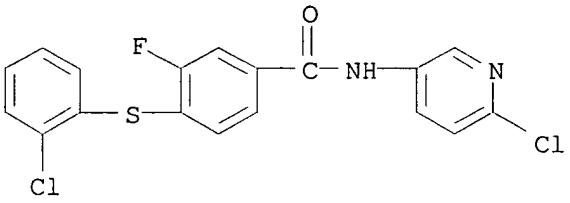
RN 378241-20-4 USPATFULL
CN Benzamide, N-(6-chloro-3-pyridinyl)-3-fluoro-4-[[(4-fluorophenyl)methyl]sulfonyl]- (9CI) (CA INDEX NAME)



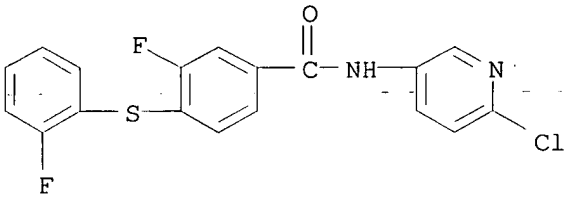
RN 378241-21-5 USPATFULL
CN Benzamide, N-(6-chloro-3-pyridinyl)-3-fluoro-4-(2-pyridinylthio)- (9CI) (CA INDEX NAME)



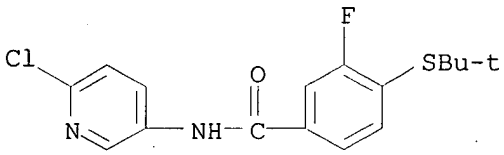
RN 378241-22-6 USPATFULL
CN Benzamide, 4-[(2-chlorophenyl)thio]-N-(6-chloro-3-pyridinyl)-3-fluoro- (9CI) (CA INDEX NAME)



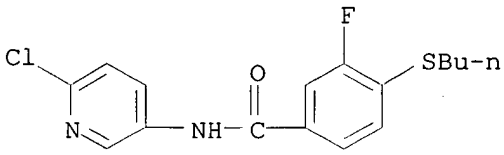
RN 378241-23-7 USPATFULL
CN Benzamide, N-(6-chloro-3-pyridinyl)-3-fluoro-4-[(2-fluorophenyl)thio]- (9CI) (CA INDEX NAME)



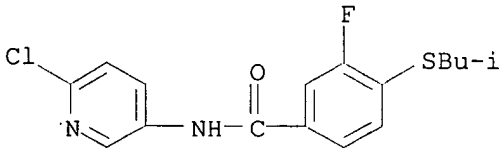
RN 378241-24-8 USPATFULL
CN Benzamide, N-(6-chloro-3-pyridinyl)-4-[(1,1-dimethylethyl)thio]-3-fluoro- (9CI) (CA INDEX NAME)



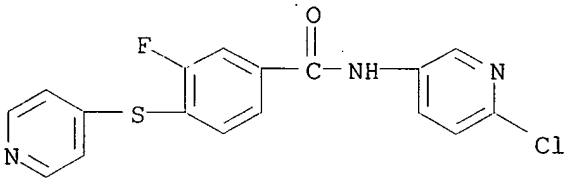
RN 378241-25-9 USPATFULL
CN Benzamide, 4-(butylthio)-N-(6-chloro-3-pyridinyl)-3-fluoro- (9CI) (CA INDEX NAME)



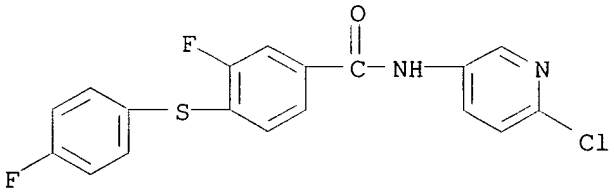
RN 378241-26-0 USPATFULL
CN Benzamide, N-(6-chloro-3-pyridinyl)-3-fluoro-4-[(2-methylpropyl)thio]- (9CI) (CA INDEX NAME)



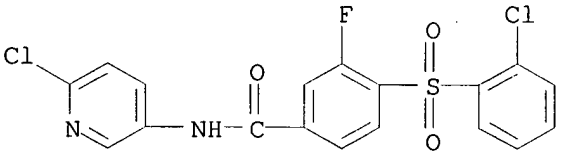
RN 378241-27-1 USPATFULL
CN Benzamide, N-(6-chloro-3-pyridinyl)-3-fluoro-4-(4-pyridinylthio)- (9CI) (CA INDEX NAME)



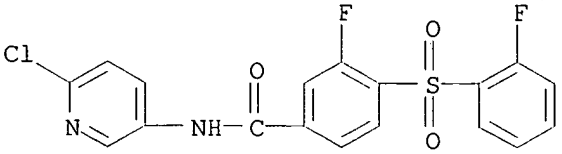
RN 378241-28-2 USPATFULL
CN Benzamide, N-(6-chloro-3-pyridinyl)-3-fluoro-4-[(4-fluorophenyl)thio]- (9CI) (CA INDEX NAME)



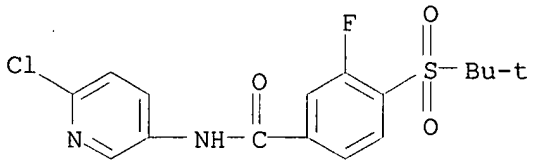
RN 378241-29-3 USPATFULL
CN Benzamide, 4-[(2-chlorophenyl)sulfonyl]-N-(6-chloro-3-pyridinyl)-3-fluoro- (9CI) (CA INDEX NAME)



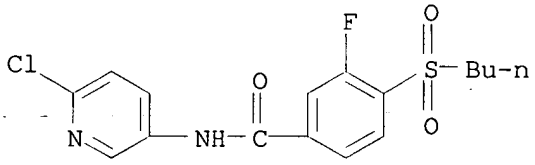
RN 378241-31-7 USPATFULL
CN Benzamide, N-(6-chloro-3-pyridinyl)-3-fluoro-4-[(2-fluorophenyl)sulfonyl]- (9CI) (CA INDEX NAME)



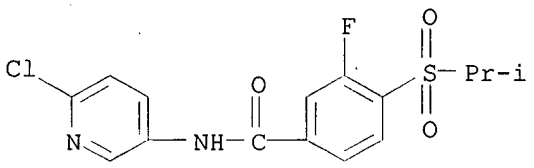
RN 378241-32-8 USPATFULL
CN Benzamide, N-(6-chloro-3-pyridinyl)-4-[(1,1-dimethylethyl)sulfonyl]-3-fluoro- (9CI) (CA INDEX NAME)



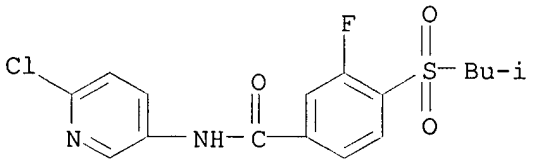
RN 378241-33-9 USPATFULL
CN Benzamide, 4-(butylsulfonyl)-N-(6-chloro-3-pyridinyl)-3-fluoro- (9CI) (CA INDEX NAME)



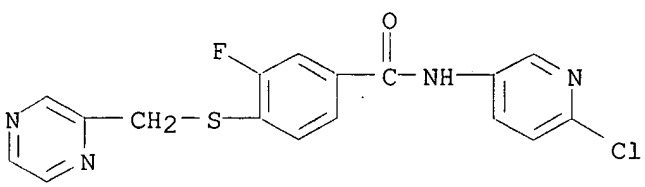
RN 378241-34-0 USPATFULL
CN Benzamide, N-(6-chloro-3-pyridinyl)-3-fluoro-4-[(1-methylethyl)sulfonyl]- (9CI) (CA INDEX NAME)



RN 378241-35-1 USPATFULL
CN Benzamide, N-(6-chloro-3-pyridinyl)-3-fluoro-4-[(2-methylpropyl)sulfonyl]- (9CI) (CA INDEX NAME)

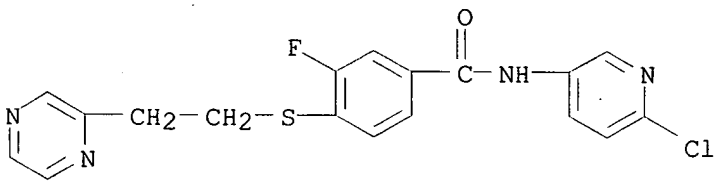


RN 378241-36-2 USPATFULL
CN Benzamide, N-(6-chloro-3-pyridinyl)-3-fluoro-4-[(pyrazinylmethyl)thio]- (9CI) (CA INDEX NAME)



RN 378241-37-3 USPATFULL

CN Benzamide, N-(6-chloro-3-pyridinyl)-3-fluoro-4-[(2-pyrazinylethyl)thio]-
(9CI) (CA INDEX NAME)



L153 ANSWER 2 OF 20 USPATFULL on STN

ACCESSION NUMBER:	2002:243644 USPATFULL
TITLE:	Novel compositions
INVENTOR(S):	Hafner, Dietrich, Konstanz, GERMANY, FEDERAL REPUBLIC OF Fistetter, Klaus, Konstanz, GERMANY, FEDERAL REPUBLIC OF

	NUMBER	KIND	DATE
PATENT INFORMATION:	US 2002132835	A1	20020919
APPLICATION INFO.:	US 2002-96258	A1	20020313 (10)
RELATED APPLN. INFO.:	Division of Ser. No. US 1999-369455, filed on 6 Aug 1999, PENDING Continuation of Ser. No. WO 1998-EP847, filed on 14 Feb 1998, UNKNOWN		

	NUMBER	DATE
PRIORITY INFORMATION:	DE 1997-19705924	19970217
	EP 1997-102639	19970219

DOCUMENT TYPE:	Utility
FILE SEGMENT:	APPLICATION
LEGAL REPRESENTATIVE:	JACOBSON HOLMAN PLLC, 400 SEVENTH STREET N.W., SUITE 600, WASHINGTON, DC, 20004
NUMBER OF CLAIMS:	7
EXEMPLARY CLAIM:	1
LINE COUNT:	423

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

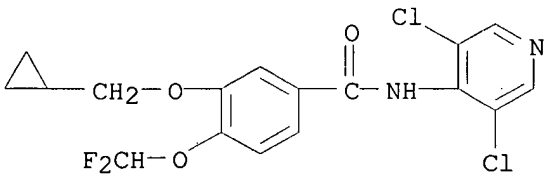
AB Novel compositions for the treatment of IRDS and ARDS are indicated which contain N-(3,5-dichloro-pyrid-4-yl)-3-cyclopropylmethoxy-4-difluoromethoxybenzamide and/or its pharmacologically tolerable salts and lung surfactant.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

IT **162401-32-3**
(pharmaceutical compns. for treatment of infant respiratory **distress syndrome** or adult respiratory **distress syndrome** contg. 3-(cyclopropylmethoxy)-n-(3,5-dichloro-4-pyridinyl)-4-(difluoromethoxy)benzamide and lung surfactant)

RN 162401-32-3 USPATFULL

CN Benzamide, 3-(cyclopropylmethoxy)-N-(3,5-dichloro-4-pyridinyl)-4-(difluoromethoxy)- (9CI) (CA INDEX NAME)



L153 ANSWER 3 OF 20 USPATFULL on STN
ACCESSION NUMBER: 2002:172364 USPATFULL
TITLE: Benzanilides as **potassium channel** openers
INVENTOR(S): McNaughton-Smith, Grant A., Morrisville, NC, UNITED STATES
Gross, Michael F., Durham, NC, UNITED STATES
Wickenden, Alan D., Cary, NC, UNITED STATES
PATENT ASSIGNEE(S): Icagen, Inc., Durham, NC, UNITED STATES, 27703 (2)

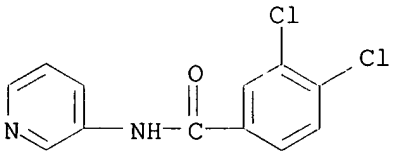
	NUMBER	KIND	DATE
PATENT INFORMATION:	US 2002091122	A1	20020711
APPLICATION INFO.:	US 2001-4122	A1	20011206 (10)

RELATED APPLN. INFO.: Division of Ser. No. US 2000-632576, filed on 4 Aug 2000, GRANTED, Pat. No. US 6372767

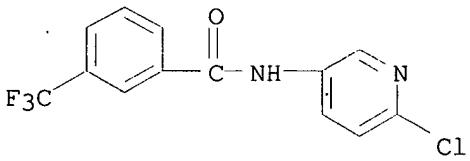
	NUMBER	DATE
PRIORITY INFORMATION:	US 1999-147221P	19990804 (60)

DOCUMENT TYPE: Utility
FILE SEGMENT: APPLICATION
LEGAL REPRESENTATIVE: TOWNSEND AND TOWNSEND AND CREW, LLP, TWO EMBARCADERO CENTER, EIGHTH FLOOR, SAN FRANCISCO, CA, 94111-3834
NUMBER OF CLAIMS: 48
EXEMPLARY CLAIM: 1
NUMBER OF DRAWINGS: 6 Drawing Page(s)
LINE COUNT: 1718
CAS INDEXING IS AVAILABLE FOR THIS PATENT.
AB Benzanilides are provided which are voltage-dependent **potassium channel** openers. Methods of using the benzanilides of the invention are also provided.

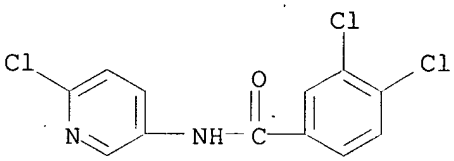
CAS INDEXING IS AVAILABLE FOR THIS PATENT.
IT **304885-01-6P 325457-87-2P 325457-88-3P**
325457-90-7P 325457-91-8P 325457-93-0P
325457-94-1P 325457-95-2P 325457-96-3P
325457-97-4P 325457-98-5P 325457-99-6P
325458-00-2P 325458-01-3P 325458-02-4P
325458-03-5P 325458-05-7P 325458-08-0P
325458-09-1P 325458-11-5P 325458-13-7P
325458-14-8P 325458-15-9P 325458-16-0P
325458-17-1P 325458-18-2P 325458-19-3P
325458-21-7P 325458-22-8P 325458-23-9P
325458-25-1P 325458-26-2P 325458-27-3P
325458-32-0P
(benzanilides as **potassium channel** openers, compns., and prepn.)
RN 304885-01-6 USPATFULL
CN Benzamide, 3,4-dichloro-N-3-pyridinyl- (9CI) (CA INDEX NAME)



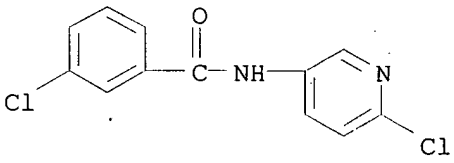
RN 325457-87-2 USPATFULL
CN Benzamide, N-(6-chloro-3-pyridinyl)-3-(trifluoromethyl)- (9CI) (CA INDEX NAME)



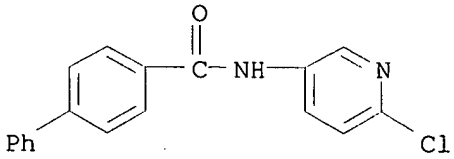
RN 325457-88-3 USPATFULL
CN Benzamide, 3,4-dichloro-N-(6-chloro-3-pyridinyl)- (9CI) (CA INDEX NAME)



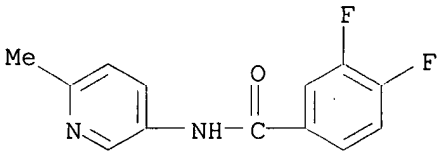
RN 325457-90-7 USPATFULL
CN Benzamide, 3-chloro-N-(6-chloro-3-pyridinyl)- (9CI) (CA INDEX NAME)



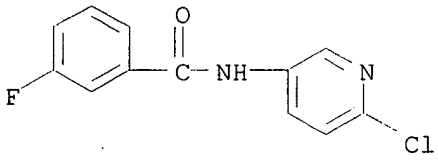
RN 325457-91-8 USPATFULL
CN [1,1'-Biphenyl]-4-carboxamide, N-(6-chloro-3-pyridinyl)- (9CI) (CA INDEX NAME)



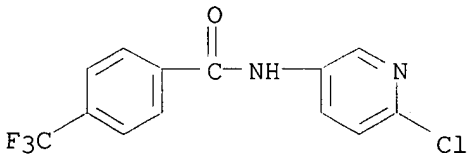
RN 325457-93-0 USPATFULL
CN Benzamide, 3,4-difluoro-N-(6-methyl-3-pyridinyl)- (9CI) (CA INDEX NAME)



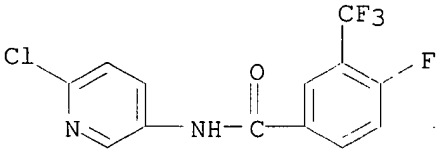
RN 325457-94-1 USPATFULL
CN Benzamide, N-(6-chloro-3-pyridinyl)-3-fluoro- (9CI) (CA INDEX NAME)



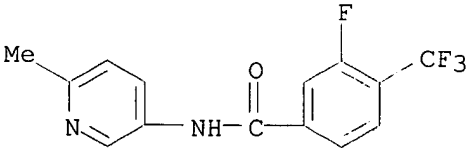
RN 325457-95-2 USPATFULL
CN Benzamide, N-(6-chloro-3-pyridinyl)-4-(trifluoromethyl)- (9CI) (CA INDEX NAME)



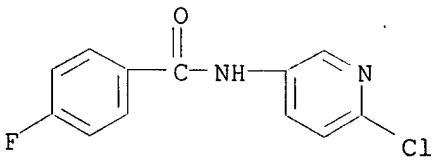
RN 325457-96-3 USPATFULL
CN Benzamide, N-(6-chloro-3-pyridinyl)-4-fluoro-3-(trifluoromethyl)- (9CI) (CA INDEX NAME)



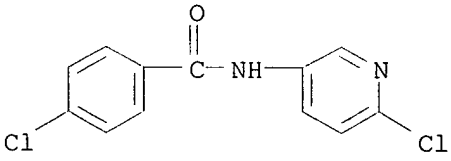
RN 325457-97-4 USPATFULL
CN Benzamide, 3-fluoro-N-(6-methyl-3-pyridinyl)-4-(trifluoromethyl)- (9CI) (CA INDEX NAME)



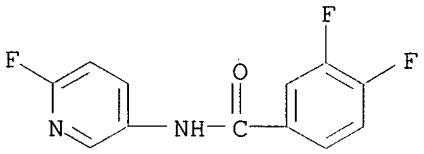
RN 325457-98-5 USPATFULL
CN Benzamide, N-(6-chloro-3-pyridinyl)-4-fluoro- (9CI) (CA INDEX NAME)



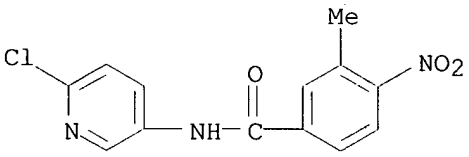
RN 325457-99-6 USPATFULL
CN Benzamide, 4-chloro-N-(6-chloro-3-pyridinyl)- (9CI) (CA INDEX NAME)



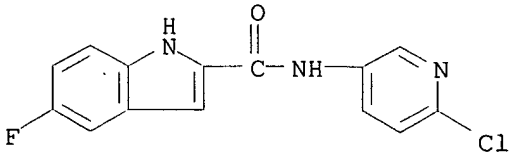
RN 325458-00-2 USPATFULL
CN Benzamide, 3,4-difluoro-N-(6-fluoro-3-pyridinyl)- (9CI) (CA INDEX NAME)



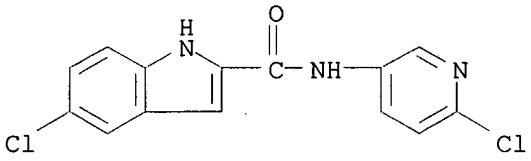
RN 325458-01-3 USPATFULL
CN Benzamide, N-(6-chloro-3-pyridinyl)-3-methyl-4-nitro- (9CI) (CA INDEX NAME)



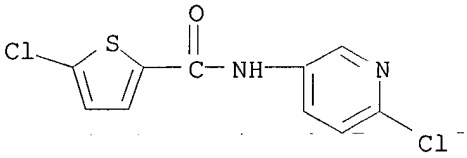
RN 325458-02-4 USPATFULL
CN 1H-Indole-2-carboxamide, N-(6-chloro-3-pyridinyl)-5-fluoro- (9CI) (CA INDEX NAME)



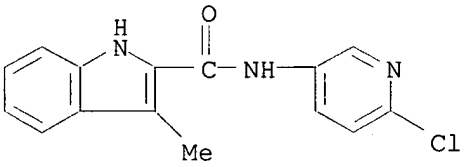
RN 325458-03-5 USPATFULL
CN 1H-Indole-2-carboxamide, 5-chloro-N-(6-chloro-3-pyridinyl)- (9CI) (CA INDEX NAME)



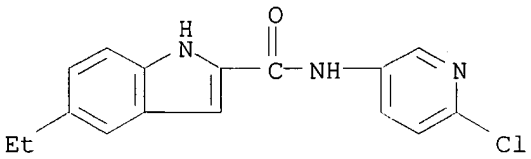
RN 325458-05-7 USPATFULL
CN 2-Thiophenecarboxamide, 5-chloro-N-(6-chloro-3-pyridinyl)- (9CI) (CA INDEX NAME)



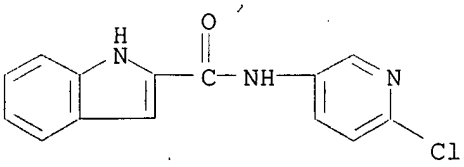
RN 325458-08-0 USPATFULL
CN 1H-Indole-2-carboxamide, N-(6-chloro-3-pyridinyl)-3-methyl- (9CI) (CA INDEX NAME)



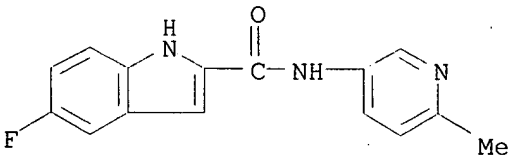
RN 325458-09-1 USPATFULL
CN 1H-Indole-2-carboxamide, N-(6-chloro-3-pyridinyl)-5-ethyl- (9CI) (CA INDEX NAME)



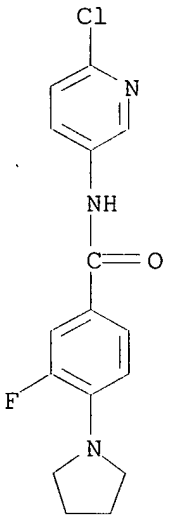
RN 325458-11-5 USPATFULL
CN 1H-Indole-2-carboxamide, N-(6-chloro-3-pyridinyl)- (9CI) (CA INDEX NAME)



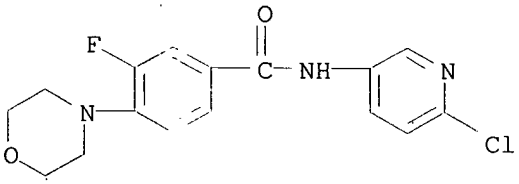
RN 325458-13-7 USPATFULL
CN 1H-Indole-2-carboxamide, 5-fluoro-N-(6-methyl-3-pyridinyl)- (9CI) (CA INDEX NAME)



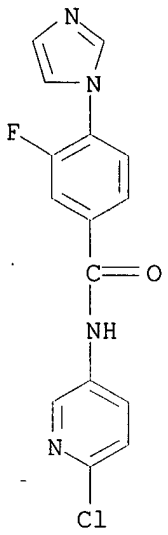
RN 325458-14-8 USPATFULL
CN Benzamide, N-(6-chloro-3-pyridinyl)-3-fluoro-4-(1-pyrrolidinyl)- (9CI) (CA INDEX NAME)



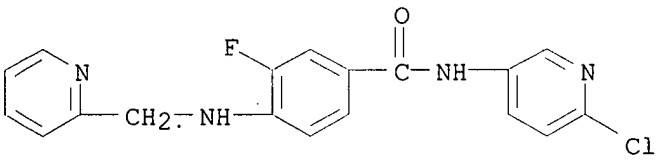
RN 325458-15-9 USPATFULL
CN Benzamide, N-(6-chloro-3-pyridinyl)-3-fluoro-4-(4-morpholinyl)- (9CI) (CA INDEX NAME)



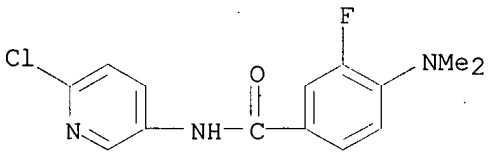
RN 325458-16-0 USPATFULL
CN Benzamide, N-(6-chloro-3-pyridinyl)-3-fluoro-4-(1H-imidazol-1-yl)- (9CI) (CA INDEX NAME)



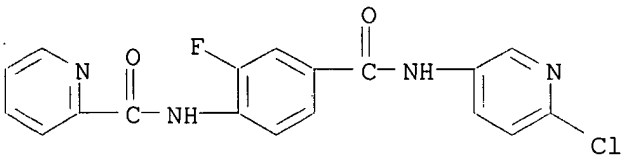
RN 325458-17-1 USPATFULL
CN Benzamide, N-(6-chloro-3-pyridinyl)-3-fluoro-4-[(2-pyridinylmethyl)amino]- (9CI) (CA INDEX NAME)



RN 325458-18-2 USPATFULL
CN Benzamide, N-(6-chloro-3-pyridinyl)-4-(dimethylamino)-3-fluoro- (9CI) (CA INDEX NAME)

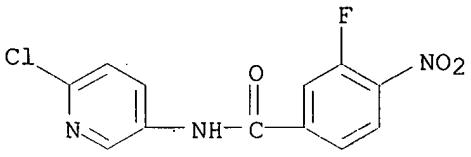


RN 325458-19-3 USPATFULL
CN 2-Pyridinecarboxamide, N-[4-[[(6-chloro-3-pyridinyl)amino]carbonyl]-2-fluorophenyl]- (9CI) (CA INDEX NAME)

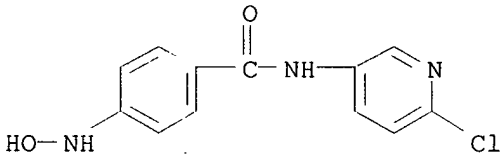


RN 325458-21-7 USPATFULL
CN Benzamide, N-(6-chloro-3-pyridinyl)-3-fluoro-4-nitro- (9CI) (CA INDEX

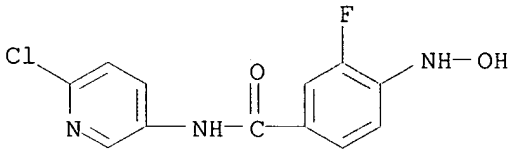
NAME)



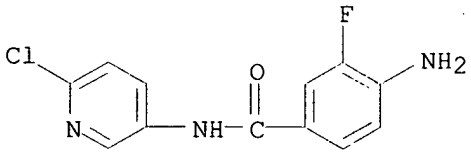
RN 325458-22-8 USPATFULL
CN Benzamide, N-(6-chloro-3-pyridinyl)-4-(hydroxyamino)- (9CI) (CA INDEX NAME)



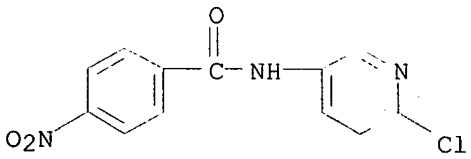
RN 325458-23-9 USPATFULL
CN Benzamide, N-(6-chloro-3-pyridinyl)-3-fluoro-4-(hydroxyamino)- (9CI) (CA INDEX NAME)



RN 325458-25-1 USPATFULL
CN Benzamide, 4-amino-N-(6-chloro-3-pyridinyl)-3-fluoro- (9CI) (CA INDEX NAME)

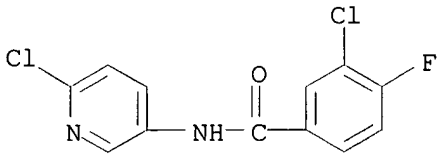


RN 325458-26-2 USPATFULL
CN Benzamide, N-(6-chloro-3-pyridinyl)-4-nitro- (9CI) (CA INDEX NAME)

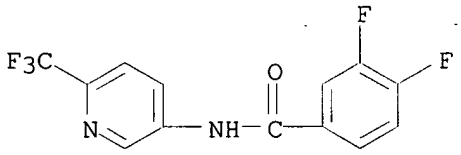


RN 325458-27-3 USPATFULL

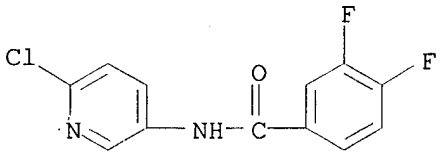
CN Benzamide, 3-chloro-N-(6-chloro-3-pyridinyl)-4-fluoro- (9CI) (CA INDEX NAME)



RN 325458-32-0 USPATFULL
CN Benzamide, 3,4-difluoro-N-[6-(trifluoromethyl)-3-pyridinyl]- (9CI) (CA INDEX NAME)



IT **325457-89-4P**
(reaction; benzanilides as **potassium channel** openers, compns., and prepn.)
RN 325457-89-4 USPATFULL
CN Benzamide, N-(6-chloro-3-pyridinyl)-3,4-difluoro- (9CI) (CA INDEX NAME)



L153 ANSWER 4 OF 20 USPATFULL on STN

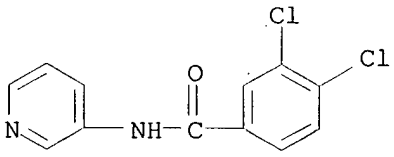
ACCESSION NUMBER:	2002:99492 USPATFULL
TITLE:	Benzanilides as **potassium channel** openers
INVENTOR(S):	McNaughton-Smith, Grant A., Morrisville, NC, UNITED STATES Gross, Michael F., Durham, NC, UNITED STATES Wickenden, Alan D., Cary, NC, UNITED STATES
PATENT ASSIGNEE(S):	Icagen, Inc., Durham, NC, UNITED STATES, 27703 (U.S. corporation)

	NUMBER	KIND	DATE
PATENT INFORMATION:	US 2002052393	A1	20020502
	US 6605725	B2	20030812
APPLICATION INFO.:	US 2001-2800	A1	20011102 (10)
RELATED APPLN. INFO.:	Division of Ser. No. US 2000-632576, filed on 4 Aug 2000, PENDING		

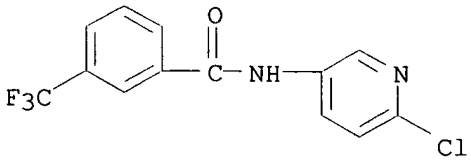
	NUMBER	DATE
PRIORITY INFORMATION:	US 1999-147221P	19990804 (60)

DOCUMENT TYPE: Utility
FILE SEGMENT: APPLICATION
LEGAL REPRESENTATIVE: TOWNSEND AND TOWNSEND AND CREW, LLP, TWO EMBARCADERO CENTER, EIGHTH FLOOR, SAN FRANCISCO, CA, 94111-3834
NUMBER OF CLAIMS: 48
EXEMPLARY CLAIM: 1
NUMBER OF DRAWINGS: 6 Drawing Page(s)
LINE COUNT: 1704
CAS INDEXING IS AVAILABLE FOR THIS PATENT.
AB Benzanilides are provided which are voltage-dependent **potassium channel** openers. Methods of using the benzanilides of the invention are also provided.

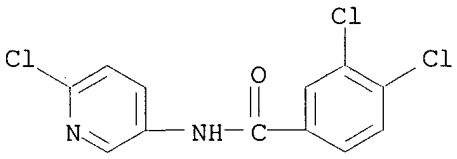
CAS INDEXING IS AVAILABLE FOR THIS PATENT.
IT **304885-01-6P 325457-87-2P 325457-88-3P**
325457-90-7P 325457-91-8P 325457-93-0P
325457-94-1P 325457-95-2P 325457-96-3P
325457-97-4P 325457-98-5P 325457-99-6P
325458-00-2P 325458-01-3P 325458-02-4P
325458-03-5P 325458-05-7P 325458-08-0P
325458-09-1P 325458-11-5P 325458-13-7P
325458-14-8P 325458-15-9P 325458-16-0P
325458-17-1P 325458-18-2P 325458-19-3P
325458-21-7P 325458-22-8P 325458-23-9P
325458-25-1P 325458-26-2P 325458-27-3P
325458-32-0P
(benzanilides as **potassium channel** openers, compns., and prepn.)
RN 304885-01-6 USPATFULL
CN Benzamide, 3,4-dichloro-N-3-pyridinyl- (9CI) (CA INDEX NAME)



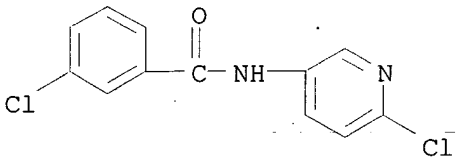
RN 325457-87-2 USPATFULL
CN Benzamide, N-(6-chloro-3-pyridinyl)-3-(trifluoromethyl)- (9CI) (CA INDEX NAME)



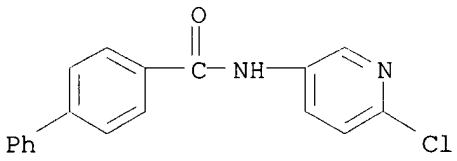
RN 325457-88-3 USPATFULL
CN Benzamide, 3,4-dichloro-N-(6-chloro-3-pyridinyl)- (9CI) (CA INDEX NAME)



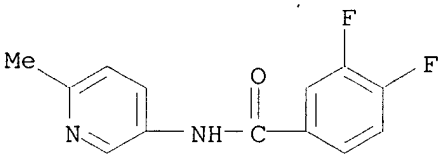
RN 325457-90-7 USPATFULL
CN Benzamide, 3-chloro-N-(6-chloro-3-pyridinyl)- (9CI) (CA INDEX NAME)



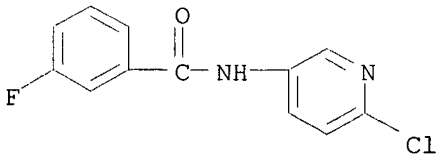
RN 325457-91-8 USPATFULL
CN [1,1'-Biphenyl]-4-carboxamide, N-(6-chloro-3-pyridinyl)- (9CI) (CA INDEX NAME)



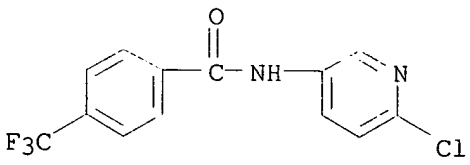
RN 325457-93-0 USPATFULL
CN Benzamide, 3,4-difluoro-N-(6-methyl-3-pyridinyl)- (9CI) (CA INDEX NAME)



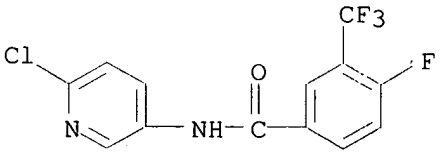
RN 325457-94-1 USPATFULL
CN Benzamide, N-(6-chloro-3-pyridinyl)-3-fluoro- (9CI) (CA INDEX NAME)



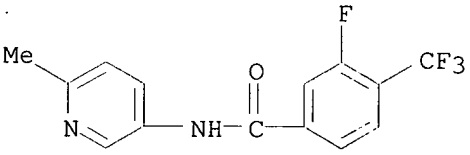
RN 325457-95-2 USPATFULL
CN Benzamide, N-(6-chloro-3-pyridinyl)-4-(trifluoromethyl)- (9CI) (CA INDEX NAME)



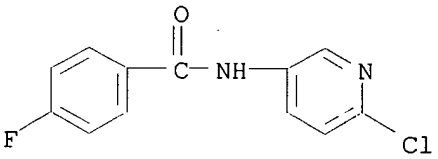
RN 325457-96-3 USPATFULL
CN Benzamide, N-(6-chloro-3-pyridinyl)-4-fluoro-3-(trifluoromethyl)- (9CI) (CA INDEX NAME)



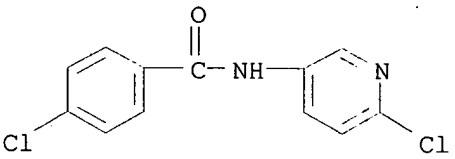
RN 325457-97-4 USPATFULL
CN Benzamide, 3-fluoro-N-(6-methyl-3-pyridinyl)-4-(trifluoromethyl)- (9CI) (CA INDEX NAME)



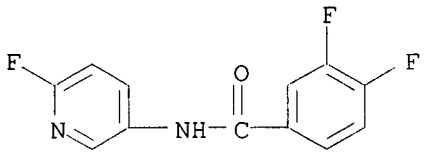
RN 325457-98-5 USPATFULL
CN Benzamide, N-(6-chloro-3-pyridinyl)-4-fluoro- (9CI) (CA INDEX NAME)



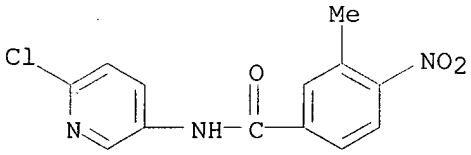
RN 325457-99-6 USPATFULL
CN Benzamide, 4-chloro-N-(6-chloro-3-pyridinyl)- (9CI) (CA INDEX NAME)



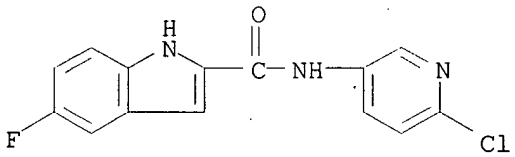
RN 325458-00-2 USPATFULL
CN Benzamide, 3,4-difluoro-N-(6-fluoro-3-pyridinyl)- (9CI) (CA INDEX NAME)



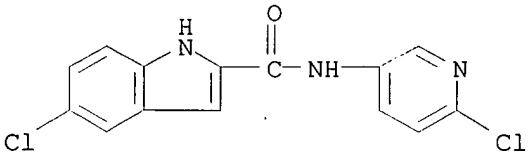
RN 325458-01-3 USPATFULL
CN Benzamide, N-(6-chloro-3-pyridinyl)-3-methyl-4-nitro- (9CI) (CA INDEX NAME)



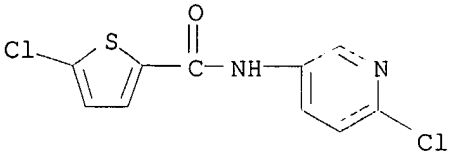
RN 325458-02-4 USPATFULL
CN 1H-Indole-2-carboxamide, N-(6-chloro-3-pyridinyl)-5-fluoro- (9CI) (CA INDEX NAME)



RN 325458-03-5 USPATFULL
CN 1H-Indole-2-carboxamide, 5-chloro-N-(6-chloro-3-pyridinyl)- (9CI) (CA INDEX NAME)

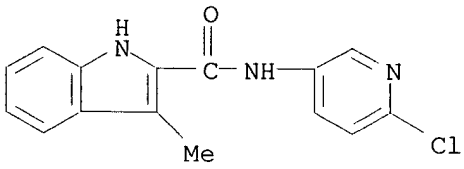


RN 325458-05-7 USPATFULL
CN 2-Thiophenecarboxamide, 5-chloro-N-(6-chloro-3-pyridinyl)- (9CI) (CA INDEX NAME)

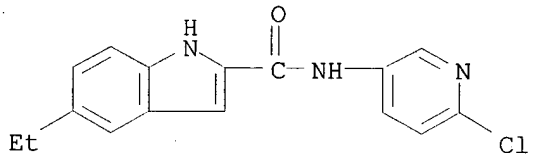


RN 325458-08-0 USPATFULL
CN 1H-Indole-2-carboxamide, N-(6-chloro-3-pyridinyl)-3-methyl- (9CI) (CA

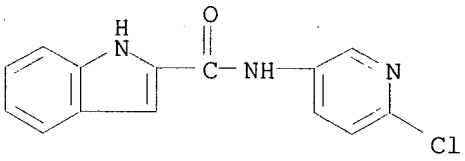
INDEX NAME)



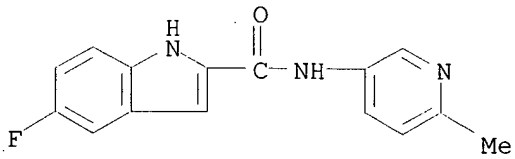
RN 325458-09-1 USPATFULL
CN 1H-Indole-2-carboxamide, N-(6-chloro-3-pyridinyl)-5-ethyl- (9CI) (CA INDEX NAME)



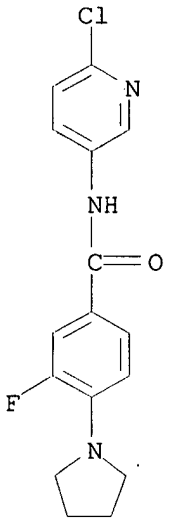
RN 325458-11-5 USPATFULL
CN 1H-Indole-2-carboxamide, N-(6-chloro-3-pyridinyl)- (9CI) (CA INDEX NAME)



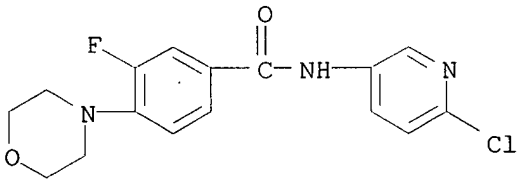
RN 325458-13-7 USPATFULL
CN 1H-Indole-2-carboxamide, 5-fluoro-N-(6-methyl-3-pyridinyl)- (9CI) (CA INDEX NAME)



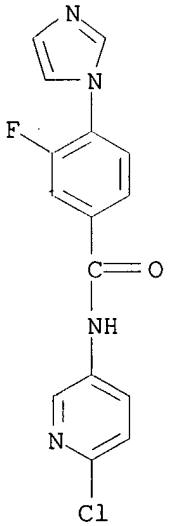
RN 325458-14-8 USPATFULL
CN Benzamide, N-(6-chloro-3-pyridinyl)-3-fluoro-4-(1-pyrrolidinyl)- (9CI) (CA INDEX NAME)



RN 325458-15-9 USPATFULL
CN Benzamide, N-(6-chloro-3-pyridinyl)-3-fluoro-4-(4-morpholinyl)- (9CI) (CA INDEX NAME)

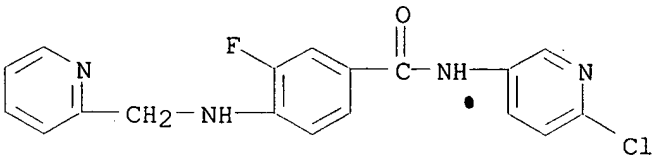


RN 325458-16-0 USPATFULL
CN Benzamide, N-(6-chloro-3-pyridinyl)-3-fluoro-4-(1H-imidazol-1-yl)- (9CI) (CA INDEX NAME)

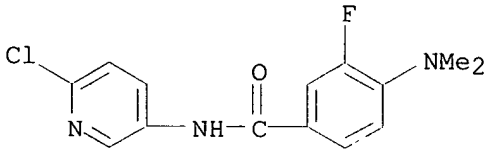


RN 325458-17-1 USPATFULL
CN Benzamide, N-(6-chloro-3-pyridinyl)-3-fluoro-4-[(2-pyridinylmethyl)amino]-

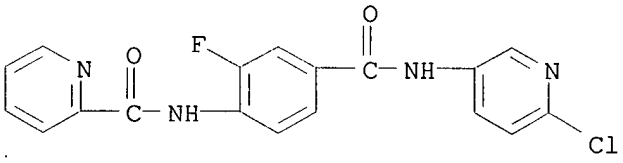
(9CI) (CA INDEX NAME)



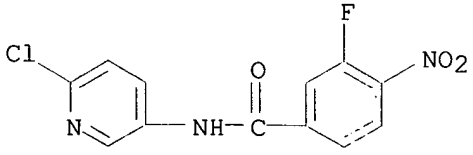
RN 325458-18-2 USPATFULL
CN Benzamide, N-(6-chloro-3-pyridinyl)-4-(dimethylamino)-3-fluoro- (9CI) (CA INDEX NAME)



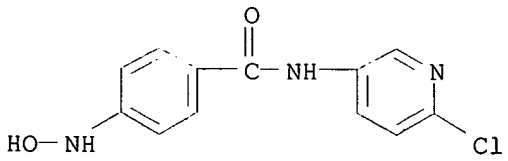
RN 325458-19-3 USPATFULL
CN 2-Pyridinecarboxamide, N-[4-[[(6-chloro-3-pyridinyl)amino]carbonyl]-2-fluorophenyl]- (9CI) (CA INDEX NAME)



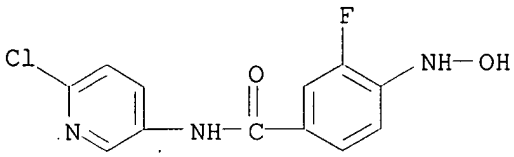
RN 325458-21-7 USPATFULL
CN Benzamide, N-(6-chloro-3-pyridinyl)-3-fluoro-4-nitro- (9CI) (CA INDEX NAME)



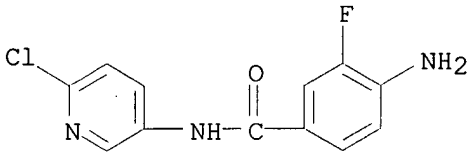
RN 325458-22-8 USPATFULL
CN Benzamide, N-(6-chloro-3-pyridinyl)-4-(hydroxyamino)- (9CI) (CA INDEX NAME)



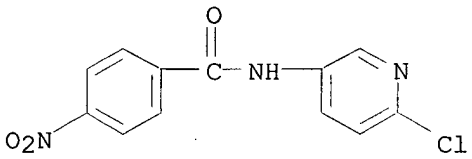
RN 325458-23-9 USPATFULL
CN Benzamide, N-(6-chloro-3-pyridinyl)-3-fluoro-4-(hydroxyamino)- (9CI) (CA INDEX NAME)



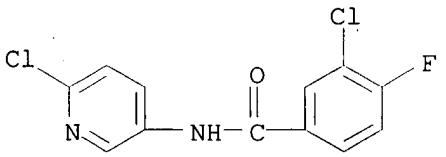
RN 325458-25-1 USPATFULL
CN Benzamide, 4-amino-N-(6-chloro-3-pyridinyl)-3-fluoro- (9CI) (CA INDEX NAME)



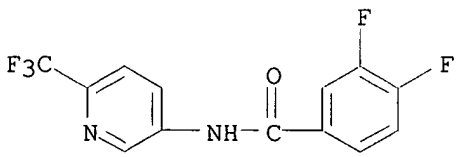
RN 325458-26-2 USPATFULL
CN Benzamide, N-(6-chloro-3-pyridinyl)-4-nitro- (9CI) (CA INDEX NAME)



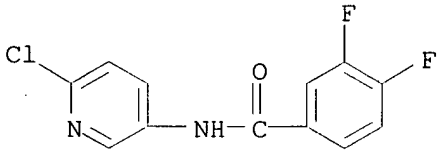
RN 325458-27-3 USPATFULL
CN Benzamide, 3-chloro-N-(6-chloro-3-pyridinyl)-4-fluoro- (9CI) (CA INDEX NAME)



RN 325458-32-0 USPATFULL
CN Benzamide, 3,4-difluoro-N-[6-(trifluoromethyl)-3-pyridinyl]- (9CI) (CA INDEX NAME)



IT **325457-89-4P**
(reaction; benzanilides as **potassium channel** openers, compns., and prepn.)
RN 325457-89-4 USPATFULL
CN Benzamide, N-(6-chloro-3-pyridinyl)-3,4-difluoro- (9CI) (CA INDEX NAME)



L153 ANSWER 5 OF 20 USPATFULL on STN
ACCESSION NUMBER: 2002:22513 USPATFULL
TITLE: Methods for treating or preventing pain and anxiety
INVENTOR(S): Wickenden, Alan David, Cary, NC, UNITED STATES
Rigdon, Gregory Cooksey, Durham, NC, UNITED STATES
McNaughton-Smith, Grant Andrew, Morrisville, NC, UNITED STATES
Gross, Michael Francis, Durham, NC, UNITED STATES

	NUMBER	KIND	DATE
PATENT INFORMATION:	US 2002013349	A1	20020131
APPLICATION INFO.:	US 2001-939230	A1	20010824 (9)

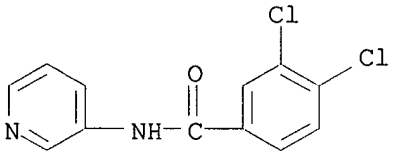
	NUMBER	DATE
PRIORITY INFORMATION:	US 2000-631747	20000804 (09)
	US 1999-147221P	19990804 (60)
	US 1999-158712P	19991008 (60)
	US 1999-165847P	19991116 (60)

DOCUMENT TYPE: Utility
FILE SEGMENT: APPLICATION
LEGAL REPRESENTATIVE: TOWNSEND AND TOWNSEND AND CREW, TWO EMBARCADERO CENTER, EIGHTH FLOOR, SAN FRANCISCO, CA, 94111-3834
NUMBER OF CLAIMS: 82
EXEMPLARY CLAIM: 1
NUMBER OF DRAWINGS: 12 Drawing Page(s)
LINE COUNT: 1795
CAS INDEXING IS AVAILABLE FOR THIS PATENT.
AB The present invention relates to a novel method of treating of pain or anxiety, using compounds that modulate **KCNQ potassium channels** and currents.

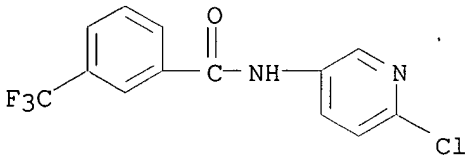
CAS INDEXING IS AVAILABLE FOR THIS PATENT.
IT **304885-01-6P 325457-87-2P 325457-88-3P**
325457-90-7P 325457-91-8P 325457-93-0P
325457-94-1P 325457-95-2P 325457-96-3P
325457-97-4P 325457-98-5P 325457-99-6P
325458-00-2P 325458-01-3P 325458-02-4P
325458-03-5P 325458-05-7P 325458-08-0P
325458-09-1P 325458-11-5P 325458-13-7P
325458-14-8P 325458-15-9P 325458-16-0P
325458-17-1P 325458-18-2P 325458-19-3P
325458-21-7P 325458-22-8P 325458-23-9P
325458-25-1P 325458-26-2P 325458-27-3P
325458-32-0P

(benzanilides as **potassium channel** openers, compns., and prepn.)

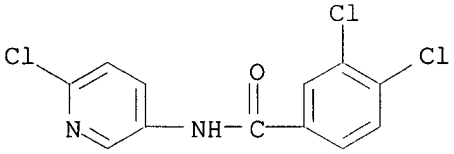
RN 304885-01-6 USPATFULL
CN Benzamide, 3,4-dichloro-N-3-pyridinyl- (9CI) (CA INDEX NAME)



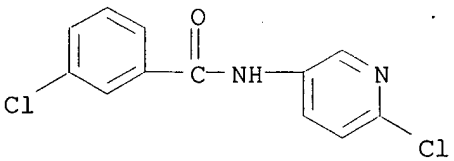
RN 325457-87-2 USPATFULL
CN Benzamide, N-(6-chloro-3-pyridinyl)-3-(trifluoromethyl)- (9CI) (CA INDEX NAME)



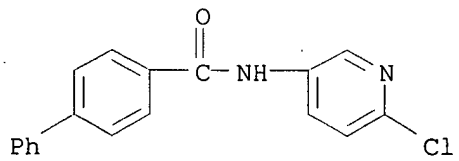
RN 325457-88-3 USPATFULL
CN Benzamide, 3,4-dichloro-N-(6-chloro-3-pyridinyl)- (9CI) (CA INDEX NAME)



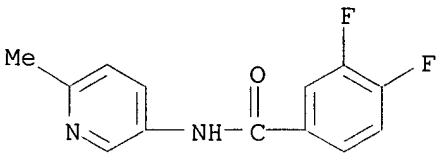
RN 325457-90-7 USPATFULL
CN Benzamide, 3-chloro-N-(6-chloro-3-pyridinyl)- (9CI) (CA INDEX NAME)



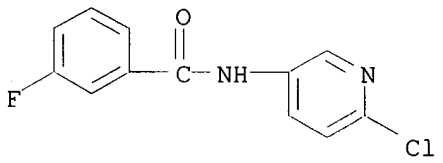
RN 325457-91-8 USPATFULL
CN [1,1'-Biphenyl]-4-carboxamide, N-(6-chloro-3-pyridinyl)- (9CI) (CA INDEX NAME)



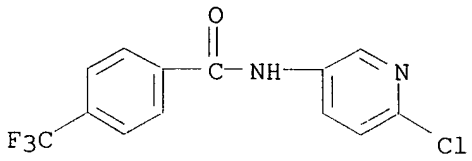
RN 325457-93-0 USPATFULL
CN Benzamide, 3,4-difluoro-N-(6-methyl-3-pyridinyl)- (9CI) (CA INDEX NAME)



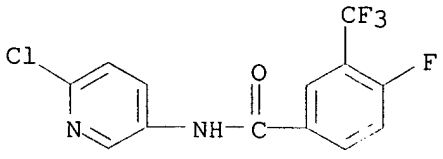
RN 325457-94-1 USPATFULL
CN Benzamide, N-(6-chloro-3-pyridinyl)-3-fluoro- (9CI) (CA INDEX NAME)



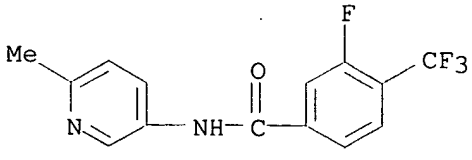
RN 325457-95-2 USPATFULL
CN Benzamide, N-(6-chloro-3-pyridinyl)-4-(trifluoromethyl)- (9CI) (CA INDEX NAME)



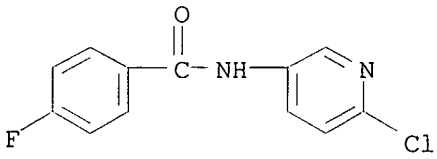
RN 325457-96-3 USPATFULL
CN Benzamide, N-(6-chloro-3-pyridinyl)-4-fluoro-3-(trifluoromethyl)- (9CI) (CA INDEX NAME)



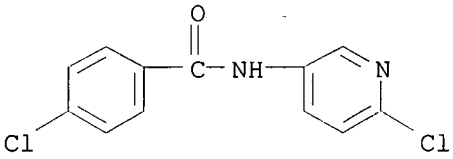
RN 325457-97-4 USPATFULL
CN Benzamide, 3-fluoro-N-(6-methyl-3-pyridinyl)-4-(trifluoromethyl)- (9CI) (CA INDEX NAME)



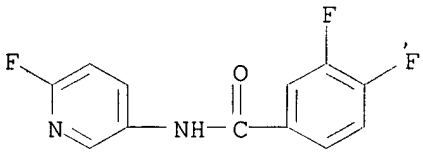
RN 325457-98-5 USPATFULL
CN Benzamide, N-(6-chloro-3-pyridinyl)-4-fluoro- (9CI) (CA INDEX NAME)



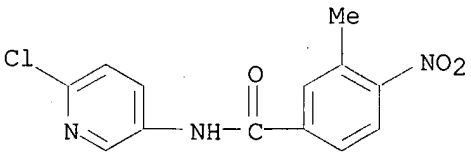
RN 325457-99-6 USPATFULL
CN Benzamide, 4-chloro-N-(6-chloro-3-pyridinyl)- (9CI) (CA INDEX NAME)



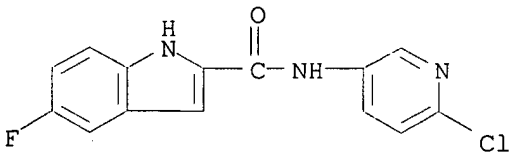
RN 325458-00-2 USPATFULL
CN Benzamide, 3,4-difluoro-N-(6-fluoro-3-pyridinyl)- (9CI) (CA INDEX NAME)



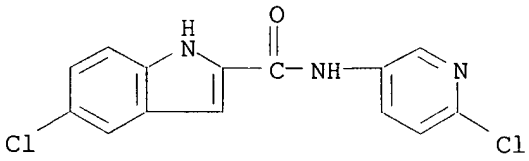
RN 325458-01-3 USPATFULL
CN Benzamide, N-(6-chloro-3-pyridinyl)-3-methyl-4-nitro- (9CI) (CA INDEX NAME)



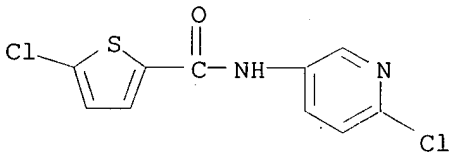
RN 325458-02-4 USPATFULL
CN 1H-Indole-2-carboxamide, N-(6-chloro-3-pyridinyl)-5-fluoro- (9CI) (CA INDEX NAME)



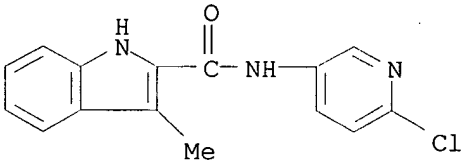
RN 325458-03-5 USPATFULL
CN 1H-Indole-2-carboxamide, 5-chloro-N-(6-chloro-3-pyridinyl)- (9CI) (CA INDEX NAME)



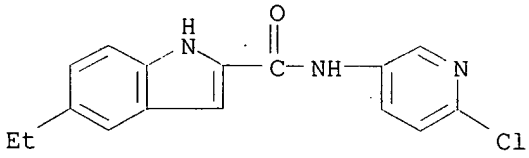
RN 325458-05-7 USPATFULL
CN 2-Thiophenecarboxamide, 5-chloro-N-(6-chloro-3-pyridinyl)- (9CI) (CA INDEX NAME)



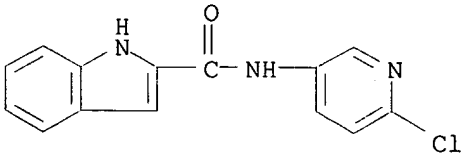
RN 325458-08-0 USPATFULL
CN 1H-Indole-2-carboxamide, N-(6-chloro-3-pyridinyl)-3-methyl- (9CI) (CA INDEX NAME)



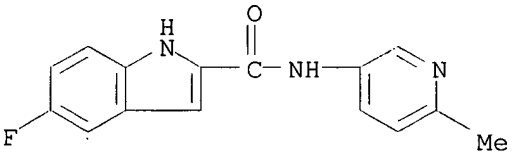
RN 325458-09-1 USPATFULL
CN 1H-Indole-2-carboxamide, N-(6-chloro-3-pyridinyl)-5-ethyl- (9CI) (CA INDEX NAME)



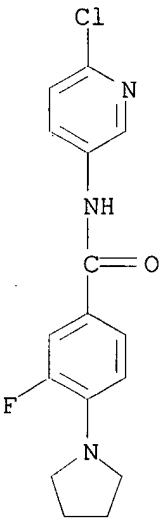
RN 325458-11-5 USPATFULL
CN 1H-Indole-2-carboxamide, N-(6-chloro-3-pyridinyl)- (9CI) (CA INDEX NAME)



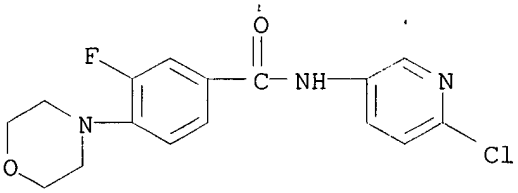
RN 325458-13-7 USPATFULL
CN 1H-Indole-2-carboxamide, 5-fluoro-N-(6-methyl-3-pyridinyl)- (9CI) (CA INDEX NAME)



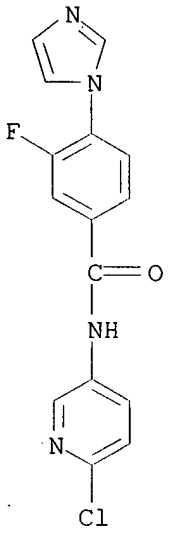
RN 325458-14-8 USPATFULL
CN Benzamide, N-(6-chloro-3-pyridinyl)-3-fluoro-4-(1-pyrrolidinyl)- (9CI) (CA INDEX NAME)



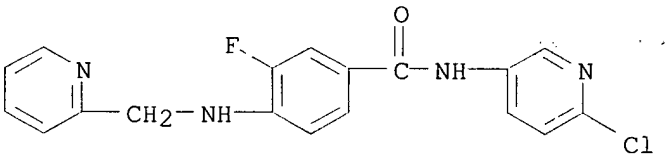
RN 325458-15-9 USPATFULL
CN Benzamide, N-(6-chloro-3-pyridinyl)-3-fluoro-4-(4-morpholinyl)- (9CI) (CA INDEX NAME)



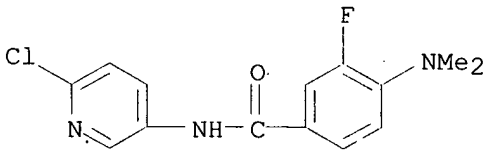
RN 325458-16-0 USPATFULL
CN Benzamide, N-(6-chloro-3-pyridinyl)-3-fluoro-4-(1H-imidazol-1-yl)- (9CI) (CA INDEX NAME)



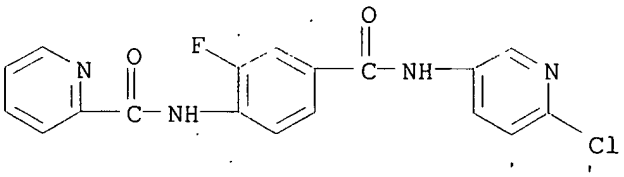
RN 325458-17-1 USPATFULL
CN Benzamide, N-(6-chloro-3-pyridinyl)-3-fluoro-4-[(2-pyridinylmethyl)amino]- (9CI) (CA INDEX NAME)



RN 325458-18-2 USPATFULL
CN Benzamide, N-(6-chloro-3-pyridinyl)-4-(dimethylamino)-3-fluoro- (9CI) (CA INDEX NAME)

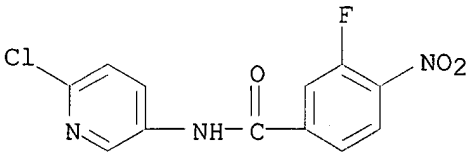


RN 325458-19-3 USPATFULL
CN 2-Pyridinecarboxamide, N-[4-[[(6-chloro-3-pyridinyl)amino]carbonyl]-2-fluorophenyl]- (9CI) (CA INDEX NAME)

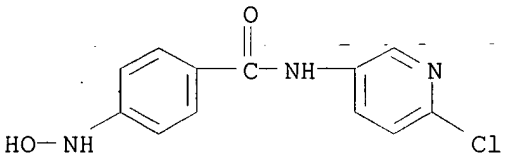


RN 325458-21-7 USPATFULL
CN Benzamide, N-(6-chloro-3-pyridinyl)-3-fluoro-4-nitro- (9CI) (CA INDEX

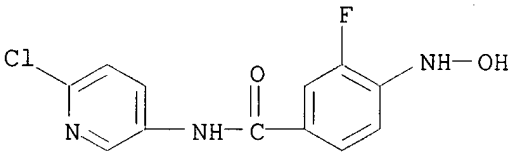
NAME)



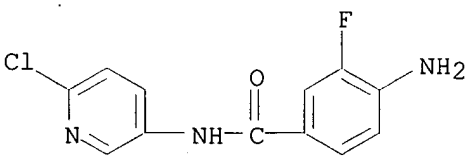
RN 325458-22-8 USPATFULL
CN Benzamide, N-(6-chloro-3-pyridinyl)-4-(hydroxyamino)- (9CI) (CA INDEX NAME)



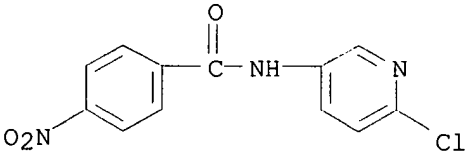
RN 325458-23-9 USPATFULL
CN Benzamide, N-(6-chloro-3-pyridinyl)-3-fluoro-4-(hydroxyamino)- (9CI) (CA INDEX NAME)



RN 325458-25-1 USPATFULL
CN Benzamide, 4-amino-N-(6-chloro-3-pyridinyl)-3-fluoro- (9CI) (CA INDEX NAME)

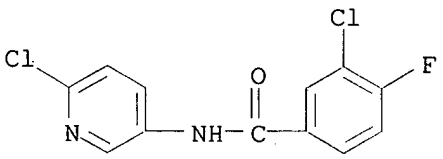


RN 325458-26-2 USPATFULL
CN Benzamide, N-(6-chloro-3-pyridinyl)-4-nitro- (9CI) (CA INDEX NAME)

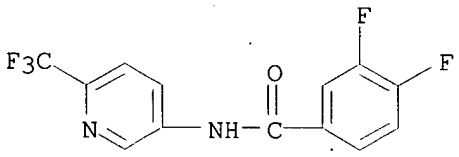


RN 325458-27-3 USPATFULL

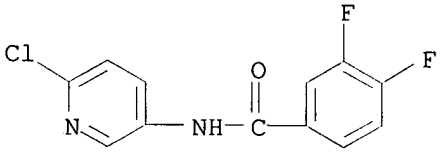
CN Benzamide, 3-chloro-N-(6-chloro-3-pyridinyl)-4-fluoro- (9CI) (CA INDEX NAME)



RN 325458-32-0 USPATFULL
CN Benzamide, 3,4-difluoro-N-[6-(trifluoromethyl)-3-pyridinyl]- (9CI) (CA INDEX NAME)



IT **325457-89-4P**
(reaction; benzanilides as **potassium channel** openers, compns., and prepn.)
RN 325457-89-4 USPATFULL
CN Benzamide, N-(6-chloro-3-pyridinyl)-3,4-difluoro- (9CI) (CA INDEX NAME)



L153 ANSWER 6 OF 20 USPATFULL on STN

ACCESSION NUMBER:	2002:209552 USPATFULL
TITLE:	Compositions for the treatment of ARDS or IRDS containing 3-(cycloproplymethoxy)-N-(3,5-dichloro-4-pyridinyl)-4-(difluoromethoxy) benzamide and lung surfactant
INVENTOR(S):	Hafner, Dietrich, Constance, GERMANY, FEDERAL REPUBLIC OF Eistetter, Klaus, Constance, GERMANY, FEDERAL REPUBLIC OF
PATENT ASSIGNEE(S):	Byk Gulden Lomberg Chemische Febrik GmbH, Constance, GERMANY, FEDERAL REPUBLIC OF (non-U.S. corporation)

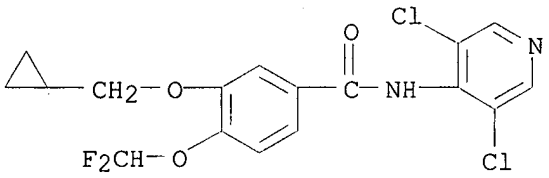
	NUMBER	KIND	DATE
PATENT INFORMATION:	US 6436970	B1	20020820
APPLICATION INFO.:	US 1999-369455		19990806 (9)
RELATED APPLN. INFO.:	Continuation of Ser. No. WO 1998-EP847, filed on 14 Feb 1998		

NUMBER	DATE

Searched by Barb O'Bryen, STIC 308-4291

PRIORITY INFORMATION: DE 1997-19705924 19970217
EP 1997-102639 19970219
DOCUMENT TYPE: Utility
FILE SEGMENT: GRANTED
PRIMARY EXAMINER: Low, Christopher S. F.
ASSISTANT EXAMINER: Lukton, David
LEGAL REPRESENTATIVE: Jacobson Holman, PLLC
NUMBER OF CLAIMS: 11
EXEMPLARY CLAIM: 1
NUMBER OF DRAWINGS: 0 Drawing Figure(s); 0 Drawing Page(s)
LINE COUNT: 410
CAS INDEXING IS AVAILABLE FOR THIS PATENT.
AB Compositions for treating IRDS and ARDS contain N-(3,5-dichloropyrid-4-yl)3-cyclopropylmethoxy-4-difluoromethoxybenzamide and/or a pharmacologically tolerable salt thereof and lung surfactant.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.
IT **162401-32-3**
(pharmaceutical compns. for treatment of infant respiratory **distress syndrome** or adult respiratory **distress syndrome** contg. 3-(cyclopropylmethoxy)-n-(3,5-dichloro-4-pyridinyl)-4-(difluoromethoxy)benzamide and lung surfactant)
RN 162401-32-3 USPATFULL
CN Benzamide, 3-(cyclopropylmethoxy)-N-(3,5-dichloro-4-pyridinyl)-4-(difluoromethoxy)- (9CI) (CA INDEX NAME)



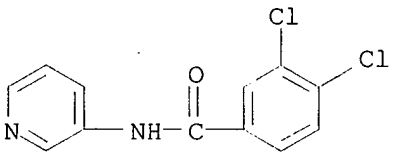
L153 ANSWER 7 OF 20 USPATFULL on STN
ACCESSION NUMBER: 2001:221063 USPATFULL
TITLE: Methods for treating or preventing pain
INVENTOR(S): Wickenden, Alan David, Cary, NC, United States
Rigdon, Gregory Cooksey, Durham, NC, United States
McNaughton-Smith, Grant Andrew, Morrisville, NC, United States
Gross, Michael Francis, Durham, NC, United States
PATENT ASSIGNEE(S): ICAgen, Inc., Durham, NC, United States (U.S. corporation)

	NUMBER	KIND	DATE
PATENT INFORMATION:	US 6326385	B1	20011204
APPLICATION INFO.:	US 2000-631747		20000804 (9)

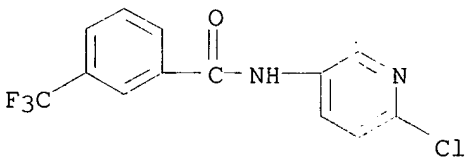
DOCUMENT TYPE: Utility
FILE SEGMENT: GRANTED
PRIMARY EXAMINER: Jarvis, William R. A.
LEGAL REPRESENTATIVE: Townsend and Townsend and Crew LLP, Parent, Annette S.
NUMBER OF CLAIMS: 31
EXEMPLARY CLAIM: 1
NUMBER OF DRAWINGS: 7 Drawing Figure(s); 12 Drawing Page(s)
LINE COUNT: 1520
CAS INDEXING IS AVAILABLE FOR THIS PATENT.
AB The present invention relates to a novel method of treating of pain, using compounds that modulate **KCNQ potassium**

channels and currents.

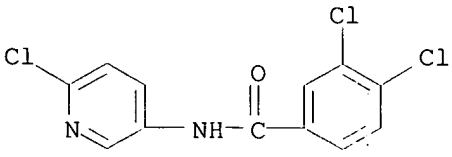
CAS INDEXING IS AVAILABLE FOR THIS PATENT.
IT **304885-01-6P 325457-87-2P 325457-88-3P**
325457-90-7P 325457-91-8P 325457-93-0P
325457-94-1P 325457-95-2P 325457-96-3P
325457-97-4P 325457-98-5P 325457-99-6P
325458-00-2P 325458-01-3P 325458-02-4P
325458-03-5P 325458-05-7P 325458-08-0P
325458-09-1P 325458-11-5P 325458-13-7P
325458-14-8P 325458-15-9P 325458-16-0P
325458-17-1P 325458-18-2P 325458-19-3P
325458-21-7P 325458-22-8P 325458-23-9P
325458-25-1P 325458-26-2P 325458-27-3P
325458-32-0P
(benzanilides as **potassium channel** openers, compns., and prepn.)
RN 304885-01-6 USPATFULL
CN Benzamide, 3,4-dichloro-N-3-pyridinyl- (9CI) (CA INDEX NAME)



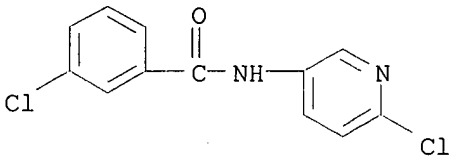
RN 325457-87-2 USPATFULL
CN Benzamide, N-(6-chloro-3-pyridinyl)-3-(trifluoromethyl)- (9CI) (CA INDEX NAME)



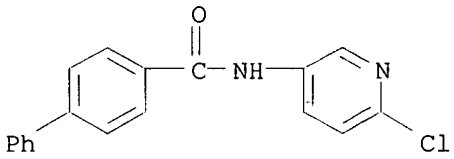
RN 325457-88-3 USPATFULL
CN Benzamide, 3,4-dichloro-N-(6-chloro-3-pyridinyl)- (9CI) (CA INDEX NAME)



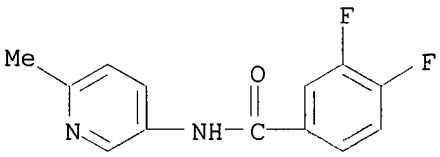
RN 325457-90-7 USPATFULL
CN Benzamide, 3-chloro-N-(6-chloro-3-pyridinyl)- (9CI) (CA INDEX NAME)



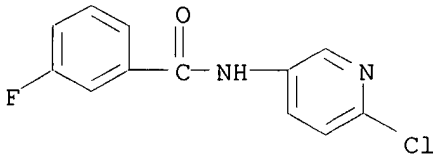
RN 325457-91-8 USPATFULL
CN [1,1'-Biphenyl]-4-carboxamide, N-(6-chloro-3-pyridinyl)- (9CI) (CA INDEX NAME)



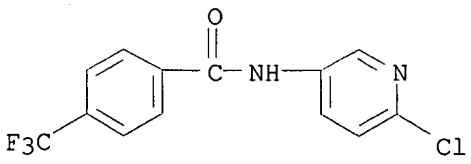
RN 325457-93-0 USPATFULL
CN Benzamide, 3,4-difluoro-N-(6-methyl-3-pyridinyl)- (9CI) (CA INDEX NAME)



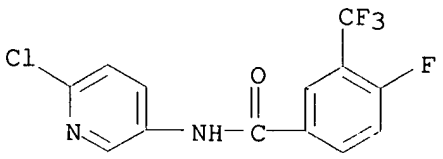
RN 325457-94-1 USPATFULL
CN Benzamide, N-(6-chloro-3-pyridinyl)-3-fluoro- (9CI) (CA INDEX NAME)



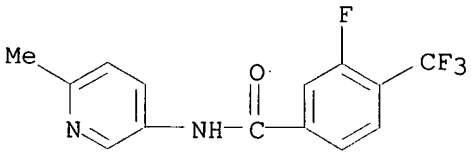
RN 325457-95-2 USPATFULL
CN Benzamide, N-(6-chloro-3-pyridinyl)-4-(trifluoromethyl)- (9CI) (CA INDEX NAME)



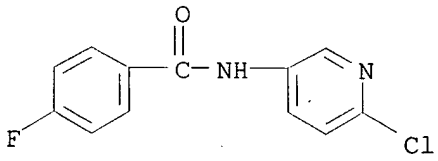
RN 325457-96-3 USPATFULL
CN Benzamide, N-(6-chloro-3-pyridinyl)-4-fluoro-3-(trifluoromethyl)- (9CI) (CA INDEX NAME)



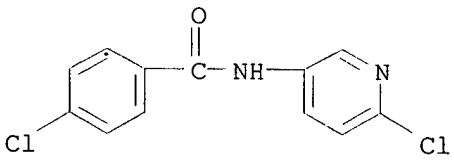
RN 325457-97-4 USPATFULL
CN Benzamide, 3-fluoro-N-(6-methyl-3-pyridinyl)-4-(trifluoromethyl)- (9CI) (CA INDEX NAME)



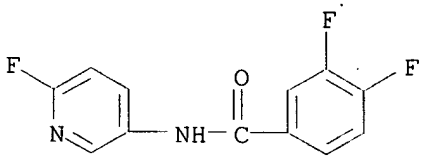
RN 325457-98-5 USPATFULL
CN Benzamide, N-(6-chloro-3-pyridinyl)-4-fluoro- (9CI) (CA INDEX NAME)



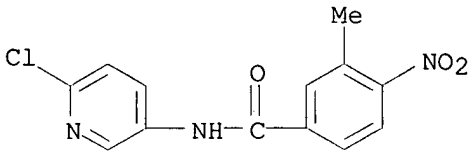
RN 325457-99-6 USPATFULL
CN Benzamide, 4-chloro-N-(6-chloro-3-pyridinyl)- (9CI) (CA INDEX NAME)



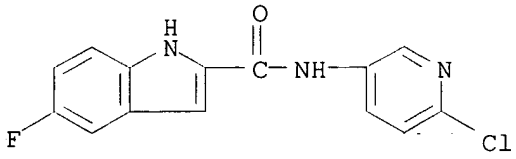
RN 325458-00-2 USPATFULL
CN Benzamide, 3,4-difluoro-N-(6-fluoro-3-pyridinyl)- (9CI) (CA INDEX NAME)



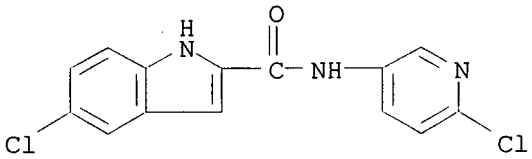
RN 325458-01-3 USPATFULL
CN Benzamide, N-(6-chloro-3-pyridinyl)-3-methyl-4-nitro- (9CI) (CA INDEX NAME)



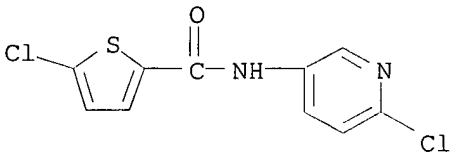
RN 325458-02-4 USPATFULL
CN 1H-Indole-2-carboxamide, N-(6-chloro-3-pyridinyl)-5-fluoro- (9CI) (CA INDEX NAME)



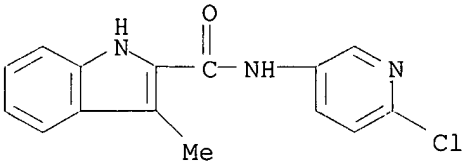
RN 325458-03-5 USPATFULL
CN 1H-Indole-2-carboxamide, 5-chloro-N-(6-chloro-3-pyridinyl)- (9CI) (CA INDEX NAME)



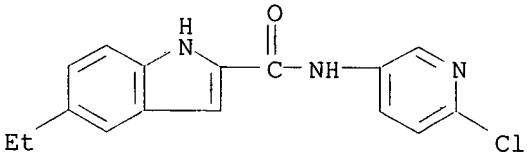
RN 325458-05-7 USPATFULL
CN 2-Thiophenecarboxamide, 5-chloro-N-(6-chloro-3-pyridinyl)- (9CI) (CA INDEX NAME)



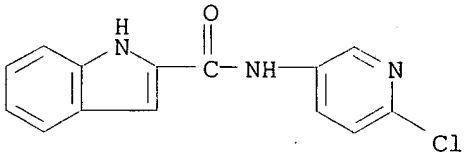
RN 325458-08-0 USPATFULL
CN 1H-Indole-2-carboxamide, N-(6-chloro-3-pyridinyl)-3-methyl- (9CI) (CA INDEX NAME)



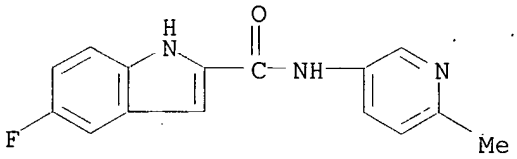
RN 325458-09-1 USPATFULL
CN 1H-Indole-2-carboxamide, N-(6-chloro-3-pyridinyl)-5-ethyl- (9CI) (CA INDEX NAME)



RN 325458-11-5 USPATFULL
CN 1H-Indole-2-carboxamide, N-(6-chloro-3-pyridinyl)- (9CI) (CA INDEX NAME)



RN 325458-13-7 USPATFULL
CN 1H-Indole-2-carboxamide, 5-fluoro-N-(6-methyl-3-pyridinyl)- (9CI) (CA INDEX NAME)



RN 325458-14-8 USPATFULL
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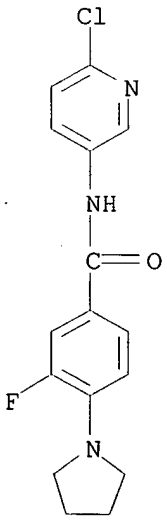
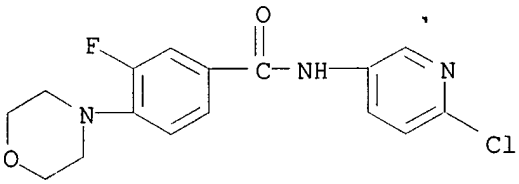
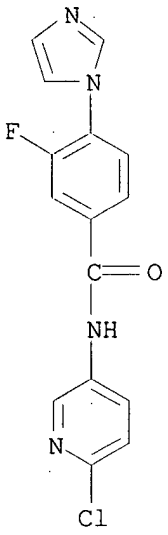


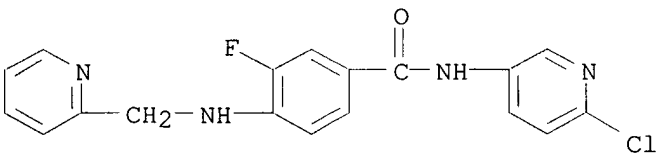
RN 325458-15-9 USPATFULL
CN Benzamide, N-(6-chloro-3-pyridinyl)-3-fluoro-4-(4-morpholinyl)- (9CI) (CA INDEX NAME)



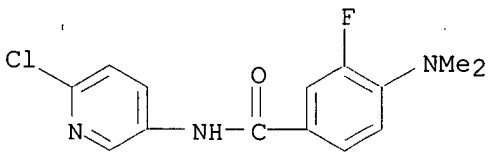
RN 325458-16-0 USPATFULL
CN Benzamide, N-(6-chloro-3-pyridinyl)-3-fluoro-4-(1H-imidazol-1-yl)- (9CI) (CA INDEX NAME)



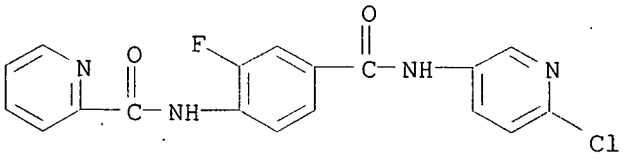
RN 325458-17-1 USPATFULL
CN Benzamide, N-(6-chloro-3-pyridinyl)-3-fluoro-4-[(2-pyridinylmethyl)amino]- (9CI) (CA INDEX NAME)



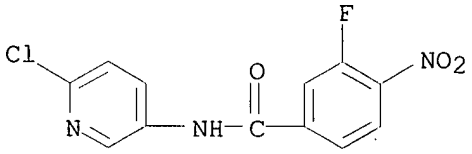
RN 325458-18-2 USPATFULL
CN Benzamide, N-(6-chloro-3-pyridinyl)-4-(dimethylamino)-3-fluoro- (9CI) (CA INDEX NAME)



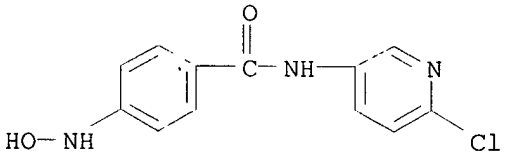
RN 325458-19-3 USPATFULL
CN 2-Pyridinecarboxamide, N-[4-[[(6-chloro-3-pyridinyl)amino]carbonyl]-2-fluorophenyl]- (9CI) (CA INDEX NAME)



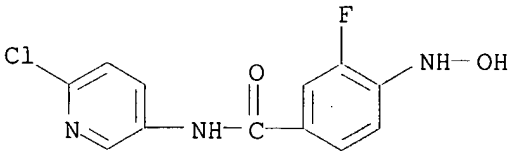
RN 325458-21-7 USPATFULL
CN Benzamide, N-(6-chloro-3-pyridinyl)-3-fluoro-4-nitro- (9CI) (CA INDEX NAME)



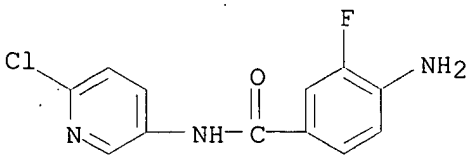
RN 325458-22-8 USPATFULL
CN Benzamide, N-(6-chloro-3-pyridinyl)-4-(hydroxyamino)- (9CI) (CA INDEX NAME)



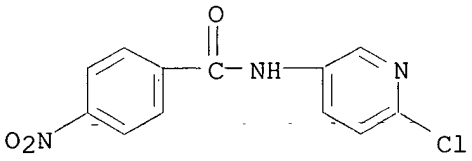
RN 325458-23-9 USPATFULL
CN Benzamide, N-(6-chloro-3-pyridinyl)-3-fluoro-4-(hydroxyamino)- (9CI) (CA INDEX NAME)



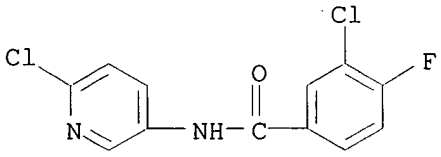
RN 325458-25-1 USPATFULL
CN Benzamide, 4-amino-N-(6-chloro-3-pyridinyl)-3-fluoro- (9CI) (CA INDEX NAME)



RN 325458-26-2 USPATFULL
CN Benzamide, N-(6-chloro-3-pyridinyl)-4-nitro- (9CI) (CA INDEX NAME)



RN 325458-27-3 USPATFULL
CN Benzamide, 3-chloro-N-(6-chloro-3-pyridinyl)-4-fluoro- (9CI) (CA INDEX NAME)



RN 325458-32-0 USPATFULL
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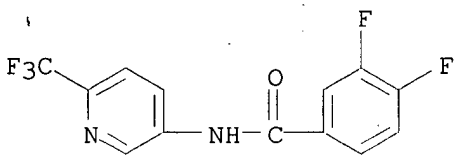
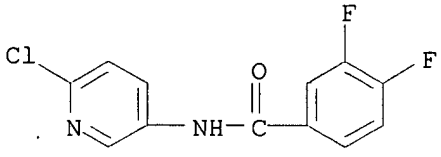


IT **325457-89-4P**
(reaction; benzanilides as **potassium channel** openers, compns., and prepn.)
RN 325457-89-4 USPATFULL
CN Benzamide, N-(6-chloro-3-pyridinyl)-3,4-difluoro- (9CI) (CA INDEX NAME)



L153 ANSWER 8 OF 20 USPATFULL on STN
ACCESSION NUMBER: 91:94552 USPATFULL
TITLE: 2-aryl-3-heterocyclicmethyl-3H-imidazo[4,5-b]pyridines as anxiolytics and anticonvulsants
INVENTOR(S): Taylor, Jr., Chandler R., Mechanicsville, VA, United States
Moses, Meredith, Glen Allen, VA, United States
PATENT ASSIGNEE(S): A. H. Robins Company, Incorporated, Richmond, VA, United States (U.S. corporation)

	NUMBER	KIND	DATE
PATENT INFORMATION:	US 5066654		19911119
APPLICATION INFO.:	US 1990-601967		19901022 (7)

DOCUMENT TYPE: Utility
FILE SEGMENT: Granted
PRIMARY EXAMINER: Dentz, Bernard
LEGAL REPRESENTATIVE: Jackson, Richard K.
NUMBER OF CLAIMS: 19
EXEMPLARY CLAIM: 1
LINE COUNT: 514
CAS INDEXING IS AVAILABLE FOR THIS PATENT.
AB There are disclosed compounds of the formula ##STR1## wherein Ar is ##STR2## Het is ##STR3## R.sup.1, R.sup.2, and R.sup.3 are each, independently, hydrogen, alkyl, aralkyl, alkoxy, carbalkoxy, trifluoromethyl, halo, cyano, or nitro;

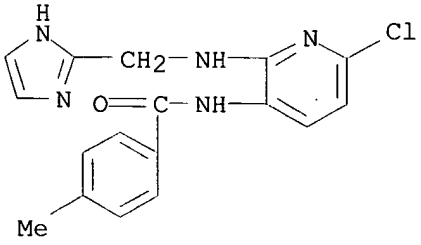
R.sup.4 is hydrogen, alkyl, aralkyl, alkoxy, carbalkoxy, halo, or trifluoromethyl;

Y is NH, O, or S;

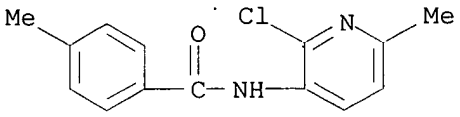
X is CH, or N;

or a pharmaceutically acceptable salt thereof, which, by virtue of their ability to bind to the benzodiazepine receptor, and prevent electrically or chemically induced seizures are useful as anxiolytic and anticonvulsant agents.

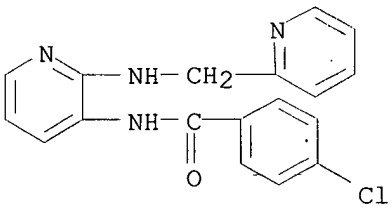
CAS INDEXING IS AVAILABLE FOR THIS PATENT.
IT **138799-92-5P 138799-93-6P 138824-02-9P**
(prepn. and reaction of, in prepn. of anticonvulsants and **anxiolytics**)
RN 138799-92-5 USPATFULL
CN Benzamide, N-[6-chloro-2-[(1H-imidazol-2-ylmethyl)amino]-3-pyridinyl]-4-methyl- (9CI) (CA INDEX NAME)



RN 138799-93-6 USPATFULL
CN Benzamide, N-(2-chloro-6-methyl-3-pyridinyl)-4-methyl- (9CI) (CA INDEX NAME)



RN 138824-02-9 USPATFULL
CN Benzamide, 4-chloro-N-[2-[(2-pyridinylmethyl)amino]-3-pyridinyl]- (9CI) (CA INDEX NAME)



L153 ANSWER 9 OF 20 USPATFULL on STN
ACCESSION NUMBER: 78:29493 USPATFULL
TITLE: Amino-benzoic acid amides
INVENTOR(S): Kruger, Gerd, Biberach, Germany, Federal Republic of
Keck, Johannes, Biberach, Germany, Federal Republic of
Noll, Klaus Reinhold, Warthausen, Germany, Federal Republic of
Pieper, Helmut, Biberach, Germany, Federal Republic of
Ziegler, Harald, Biberach, Germany, Federal Republic of
Ballhause, Helmut, Biberach, Germany, Federal Republic of
Kahling, Joachim, Biberach, Germany, Federal Republic of
PATENT ASSIGNEE(S): Boehringer Ingelheim GmbH, Ingelheim am Rhein, Germany, Federal Republic of (non-U.S. corporation)

	NUMBER	KIND	DATE	
PATENT INFORMATION:	US 4093734		19780606	
APPLICATION INFO.:	US 1976-734818		19761022	(5)

	NUMBER	DATE
PRIORITY INFORMATION:	DE 1975-2548968	19751103
	DE 1976-2635873	19760810
	DE 1976-2639645	19760903

DOCUMENT TYPE: Utility
FILE SEGMENT: Granted
PRIMARY EXAMINER: Tovar, Jose
LEGAL REPRESENTATIVE: Hammond & Littell
NUMBER OF CLAIMS: 7
EXEMPLARY CLAIM: 1,6
LINE COUNT: 949
CAS INDEXING IS AVAILABLE FOR THIS PATENT.
AB Compounds of the formula ##STR1## wherein (A) WHEN THE AMINO-SUBSTITUENT IS IN THE P-POSITION WITH RESPECT TO THE CARBONYL GROUP,

R.sub.1 is chlorine in the o-position with respect to the carbonyl group,

R.sub.2 is hydrogen, and

R.sub.3 is ethylamino, cyclopentylamino, cyclohexylamino, cycloheptylamino, N-methyl-cyclohexylamino, benzylamino or 1-ethyl-pyrrolidyl-(2)-aminomethyl, or

(b) when the amino-substituent is in the o--, m-- or p-position with respect to the carbonyl group,

R.sub.1 is hydrogen, chlorine or bromine,

R.sub.2 is trifluoromethyl, nitro or, when R.sub.4 is 1-(alkyl of 1 to 3 carbon atoms)-pyrrolidyl or 1-(alkyl of 1 to 3 carbon atoms)-piperidyl, also fluorine, chlorine, bromine or methyl,

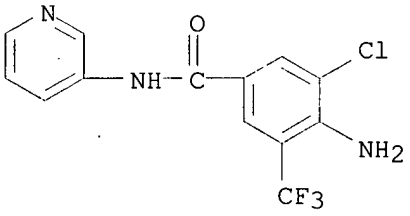
R.sub.3 is (alkyl of 1 to 5 carbon atoms)-amino, (cycloalkyl of 3 to 7 carbon atoms)-amino, benzylamino, quinuclidinyl-amino or --NH--(CH.sub.2).sub.n --R.sub.4

where R.sub.4 is pyridyl, 1-(alkyl of 1 to 3 carbon atoms)-pyrrolidyl, 1-(alkyl of 1 to 3 carbon atoms)-piperidyl or, when n is 2 or 3, also imidazolonyl, pyrrolidino, piperidino or morpholino, and

n is 0, 1, 2 or 3,

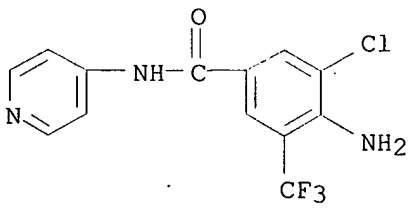
And non-toxic, pharmacologically acceptable acid addition salts thereof; the compounds as well as their salts are useful as anxiolytics, anticonvulsives, antiemetics and antiulcerogenics.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.
IT **63497-82-5P 63497-84-7P**
(prepn. of)
RN 63497-82-5 USPATFULL
CN Benzamide, 4-amino-3-chloro-N-3-pyridinyl-5-(trifluoromethyl)-, monohydrochloride (9CI) (CA INDEX NAME)



● HCl

RN 63497-84-7 USPATFULL
CN Benzamide, 4-amino-3-chloro-N-4-pyridinyl-5-(trifluoromethyl)- (9CI) (CA INDEX NAME)

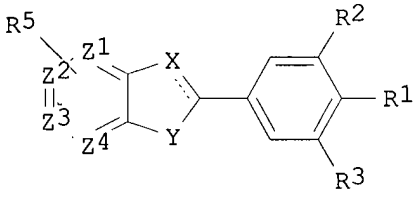


L153 ANSWER 10 OF 20 CAPLUS COPYRIGHT 2003 ACS on STN
ACCESSION NUMBER: 2003:454303 CAPLUS
DOCUMENT NUMBER: 139:36519
TITLE: Preparation of 2-phenylbenzoxazoles as metabotropic glutamate ~~receptor-5 modulators~~ for treatment of pain and CNS disorders
INVENTOR(S): Munoz, Benito; Stearns, Brian; Vernier, Jean-Michel; Wang, Bowei; Bonnefous, Celine; Zhao, Xiumin; Arruda, Jeannie; Campbell, Brian T.; Cube, Rowena V.
PATENT ASSIGNEE(S): Merck & Co., Inc., USA
SOURCE: PCT Int. Appl., 114 pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

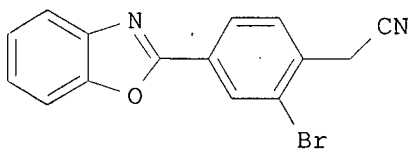
PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2003048137	A1	20030612	WO 2002-US38201	20021126

W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, OM, PH, PL, PT, RO, RU, SC, SD, SE, SG, SI, SK, SL, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM
RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG

PRIORITY APPLN. INFO.: US 2001-334547P P 20011130
OTHER SOURCE(S): MARPAT 139:36519
GI



I



II

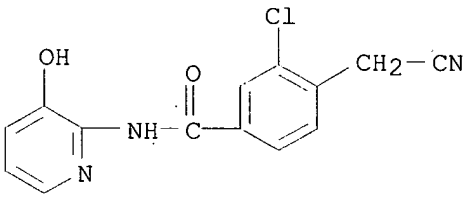
AB Title compds. I [wherein X = N, CH, or NH; Y = O or NR4; Z1-Z4 = CH or 1 of Z1-Z4 = optionally N or NH; R1 = OH, halo, CN, or (un)substituted (cyclo)alkyl, alkoxy, alkylphenyl, alkylpyridyl, alkylimidazolyl, alkylpyrazolyl, alkyltriazolyl, alkyltetrazolyl, alkyldioxolanyl, alkylthiazolyl, alkylpiperidinyl, alkylpyrrolidinyl, alkylmorpholinyl, alkylpyrimidinyl, alkynylthiazolyl, or (di)alkylamino; R2 = H, halo, OH,

CN, (di)alkylamino, NO2, or (un)substituted alkyl, alkoxy, alkylphenyl, or alkoxyphenyl; R3 = H or alkoxy; R4 = alkyl; R5 = H, halo, or alkyl; and pharmaceutically acceptable salts thereof] were prepd. as metabotropic glutamate receptor-5 (mGluR5) modulators. For example, amidation of 3-bromo-4-methylbenzoic acid with 2-aminophenol, followed by reflux with p-TsOH in toluene for 4 h gave 2-(3-bromo-4-methylphenyl)-1,3-benzoxazole. Bromination and substitution with NaCN in DMF/H2O afforded [4-(1,3-benzoxazol-2-yl)-2-bromophenyl]acetonitrile (II). Eighty compds. of the invention were tested in calcium flux and phosphatidylinositol hydrolysis assays and showed mGluR5 inhibitory activity with IC50 values of < 5 .mu.M and < 100 .mu.M, resp. Thus, I and pharmaceutical compns. comprising I are useful in the treatment of psychiatric and mood disorders, such as schizophrenia, anxiety, depression, and panic, as well as in the treatment of pain and other CNS diseases (no data).

IT **540497-02-7P**, 3-Chloro-4-(cyanomethyl)-N-(3-hydroxypyridin-2-yl)benzamide
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)
(intermediate; prepn. of phenylbenzoxazoles as mGluR5 inhibitors treatment of pain and CNS disorders)

RN 540497-02-7 CAPLUS

CN Benzamide, 3-chloro-4-(cyanomethyl)-N-(3-hydroxy-2-pyridinyl)- (9CI) (CA INDEX NAME)



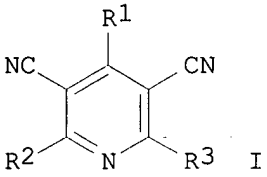
REFERENCE COUNT: 1 THERE ARE 1 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L153 ANSWER 11 OF 20 CAPLUS COPYRIGHT 2003 ACS on STN
ACCESSION NUMBER: 2002:72052 CAPLUS
DOCUMENT NUMBER: 136:118474
TITLE: Preparation of dicyanopyridine derivatives as high-conductance calcium-sensitive **potassium channel** openers
INVENTOR(S): Harada, Hironori; Watanuki, Susumu; Takuwa, Tomofumi; Kawaguchi, Kenichi; Okazaki, Toshio; Hirano, Yuusuke; Saitoh, Chikashi
PATENT ASSIGNEE(S): Yamanouchi Pharmaceutical Co., Ltd., Japan
SOURCE: PCT Int. Appl., 92 pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: Japanese
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2002006237	A1	20020124	WO 2001-JP6136	20010716

W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM

RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG
AU 2001069529 A5 20020130 AU 2001-69529 20010716
EP 1302463 A1 20030416 EP 2001-948028 20010716
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR
PRIORITY APPLN. INFO.: JP 2000-216982 A 20000718
WO 2001-JP6136 W 20010716
OTHER SOURCE(S): MARPAT 136:118474
GI



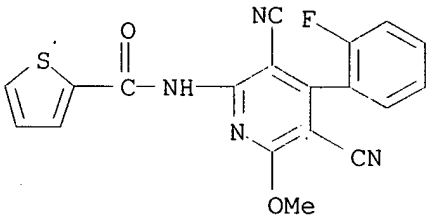
I

AB Claimed are therapeutic agents for opening high-conductance calcium-sensitive potassium channel contg. the title compds. [I; R1 = H, (un)substituted lower alkyl, cycloalkyl, aryl, heteroaryl, or 5 to 6-membered satd. heterocyclyl; R2, R3 = OR4, S(O)nR4, NR4R5, NHCOR5, NHS(O)nR5, NHCONR4R5, N(COR5)2, halo, (un)substituted heteroaryl; wherein R4 = H, (un)substituted lower alkyl, lower alkenyl, alkynyl, aryl, heteroaryl, or 5 to 6-membered satd. heterocyclyl; R5 = H, (un)substituted lower alkyl, cycloalkyl, lower alkoxy-lower alkyl, aryloxy-lower alkyl, aryl-lower alkyl, (un)substituted aryl or heteroaryl; or R4 and R5 are taken together with the adjacent N atom to form a 5 to 6-membered satd. heterocyclyl or heteroaryl; n = 0, 1,2] or salts thereof as the active ingredients. The compds. I exhibit excellent activity of opening the maxi-K channel, also called as BK channel, and bladder smooth muscle contracting activity based on the maxi-K opening activity, and thus can be used in the treatment of frequent urination and urinary incontinence. Thus, 0.70 g Na was dissolved in 20 mL MeOH at room temp. with stirring, followed by adding 0.85 g malononitrile and 2.0g 2-(thiophen-3-ylmethylidene)malononitrile, and the resulting mixt. was refoxed with stirring for 3 h to give 2-amino-6-methoxy-4-(2-thienyl)pyridine-3,5-dicarbonitrile (II). II and 2-amino-6-(2-pyridylmethoxy)-4-(2-fluorophenyl)pyridine-3,5-dicarbonitrile showed IC50 of 0.15 and 0.042 .mu.M, resp., for inhibiting the K+ ion-induced contraction of rat bladder.

IT **391668-23-8P**
RL: PAC (Pharmacological activity); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)
(prepn. of dicyanopyridine derivs. as high-conductance calcium-sensitive **potassium channel** openers for treatment of frequent urination and urinary incontinence)

RN 391668-23-8 CAPLUS

CN 2-Thiophenecarboxamide, N-[3,5-dicyano-4-(2-fluorophenyl)-6-methoxy-2-pyridinyl]- (9CI) (CA INDEX NAME)



REFERENCE COUNT: 12 THERE ARE 12 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L153 ANSWER 12 OF 20 CAPLUS COPYRIGHT 2003 ACS on STN
ACCESSION NUMBER: 2001:693264 CAPLUS
DOCUMENT NUMBER: 135:257269
TITLE: Preparation of N-heterocyclyl amide compounds as 5-HT antagonists
INVENTOR(S): Yamada, Akira; Tomishima, Masaki; Hayashida, Hisashi; Imanishi, Masashi; Spears, Glen W.; Ito, Kiyotaka; Takahashi, Fumie; Miyake, Hiroshi
PATENT ASSIGNEE(S): Fujisawa Pharmaceutical Co., Ltd., Japan
SOURCE: PCT Int. Appl., 239 pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: Japanese
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2001068585	A1	20010920	WO 2001-JP1993	20010313
W: AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CU, CZ, DE, DK, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, UA, UG, US, UZ, VN, YU, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM				
RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG				
AU 2001041128	A5	20010924	AU 2001-41128	20010313
EP 1264820	A1	20021211	EP 2001-912338	20010313
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR				

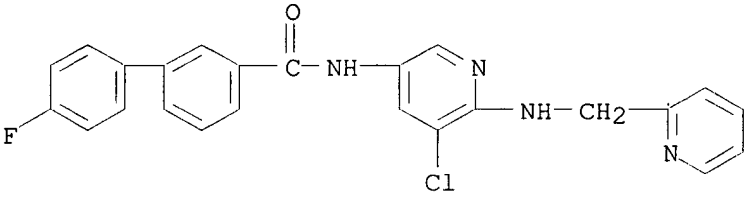
PRIORITY APPLN. INFO.: JP 2000-70127 A 20000314
JP 2000-305947 A 20001005
WO 2001-JP1993 W 20010313
OTHER SOURCE(S): CASREACT 135:257269; MARPAT 135:257269

AB Amides compds. represented by the general formula R1-A-X-NHCO-Y-R2 [wherein R1 is an optionally substituted heterocyclic group or optionally substituted phenyl; R2 is optionally substituted fused Ph, optionally substituted Ph, or optionally substituted thienyl; A is a group represented by the formula -(CH2)t-(O)m- or -(CR3R4)pNR5(CO)n- (wherein R3 and R4 each is hydrogen or R3 and R4 in combination form imino; R5 is hydrogen or lower alkyl; t is 0, 1, or 2; and p, m, and n each is 0 or 1); X is optionally substituted phenylene or an optionally substituted, divalent, nitrogenous heterocyclic group; and Y is a bond, lower alkylene, or lower alkenylene] and salts thereof are prepd. Theses amides include phenylacetamide, cinnamides, 1H-indole-7-carboxamides, 3-(2-pyridyl)-2-propenamides, 5-phenyl-2-thiophenecarboxamides, 9H-carbazolecarboxamides, 3-phenyl-2-propenamides, 9H-fluorene-1-carboxamides, 2,3-dihydrobenz[b]oxepine-4-carboxamides,

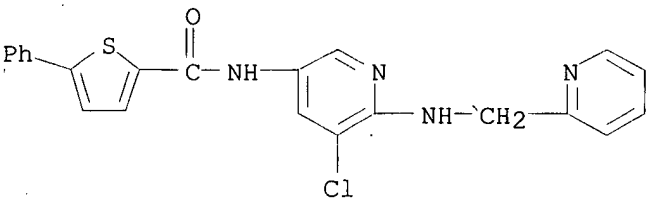
1H-benzo[b]thiepin-4-carboxamides, and 3-(1H-indol-3-yl)-2-propenamides. They are antagonists of 5-hydroxytryptamine (5-HT), in particular 5-HT2c, and are useful for the treatment of 5-HT-mediated diseases such as (1) central nervous system disorders in including anxiety, depression, obsessive-compulsive neurosis, migraine headache, anorexia, Alzheimer's disease, sleep disorder, over-eating, and panic, (2) withdrawal symptom caused by cocaine, ethanol, nicotine, and benzodiazepine, (3) schizophrenia, (4) spinal cord injury, and /or (5) head injury such as hydrocephalus. Thus, SOCl2 was added to a soln. of (E)-4-phenyl-3-butenoic acid in benzene, heated under reflux for 1 h, and cooled, followed by adding 3-(imidazol-1-yl)aniline and Et3N, and the resulting mixt. was stirred at room temp. for 1 h to give (3E)-N-[3-(imidazol-1-yl)phenyl]-4-phenyl-3-butenamide (I). I in vitro inhibited by 82% the binding of [3H]mesulergine to 5-HT2c receptor which was prepd. from rat frontal lobe cortex.

IT **361551-35-1P 361551-37-3P 361551-39-5P**
RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)
(prepn. of N-heterocyclyl amide compds. as 5-HT antagonists for treatment of 5-HT-mediated diseases such as central nervous system disorders, drug withdrawal symptom, schizophrenia, spinal code injury, and head injury)

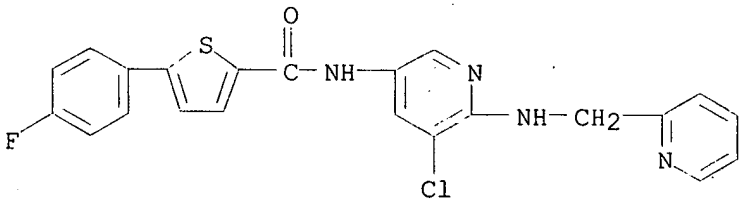
RN 361551-35-1 CAPLUS
CN [1,1'-Biphenyl]-3-carboxamide, N-[5-chloro-6-[(2-pyridinylmethyl)amino]-3-pyridinyl]-4'-fluoro- (9CI) (CA INDEX NAME)



RN 361551-37-3 CAPLUS
CN 2-Thiophenecarboxamide, N-[5-chloro-6-[(2-pyridinylmethyl)amino]-3-pyridinyl]-5-phenyl- (9CI) (CA INDEX NAME)



RN 361551-39-5 CAPLUS
CN 2-Thiophenecarboxamide, N-[5-chloro-6-[(2-pyridinylmethyl)amino]-3-pyridinyl]-5-(4-fluorophenyl)- (9CI) (CA INDEX NAME)



REFERENCE COUNT: 32 THERE ARE 32 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L153 ANSWER 13 OF 20 CAPLUS COPYRIGHT 2003 ACS on STN
ACCESSION NUMBER: 2001:114932 CAPLUS
DOCUMENT NUMBER: 134:157577
TITLE: Benzanilides as **potassium channel** openers, compositions, and preparation thereof
INVENTOR(S): McNaughton-Smith, Grant Andrew; Gross, Michael Francis; Wickenden, Alan David
PATENT ASSIGNEE(S): Icagen, Inc., USA
SOURCE: PCT Int. Appl., 55 pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 3
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2001010380	A2	20010215	WO 2000-US21308	20000804
WO 2001010380	A3	20010816		
W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CR, CU, CZ, DE, DK, DM, DZ, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM				
RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG				
AU 2000067585	A5	20010305	AU 2000-67585	20000804
US 6326385	B1	20011204	US 2000-631747	20000804
EP 1208085	A2	20020529	EP 2000-955367	20000804
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL				
JP 2003506387	T2	20030218	JP 2001-514905	20000804
US 2002013349	A1	20020131	US 2001-939230	20010824

PRIORITY APPLN. INFO.:
US 1999-147221P P 19990804
US 1999-158712P P 19991008
US 1999-165847P P 19991116
US 2000-631747 A 20000804
US 2000-632576 A 20000804
WO 2000-US21308 W 20000804

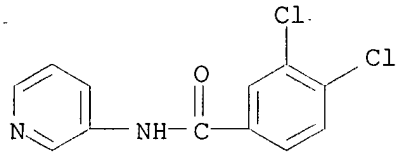
OTHER SOURCE(S): MARPAT 134:157577

AB Benzanilides are provided which are voltage-dependent potassium channel openers. Compns. and methods of using the benzanilides are also provided. The compds. of the invention are useful for the treatment of central and peripheral nervous system disorders.

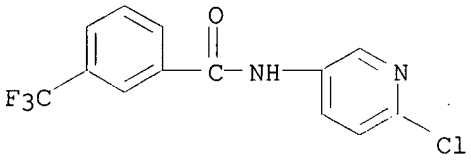
IT **304885-01-6P 325457-87-2P 325457-88-3P**
325457-90-7P 325457-91-8P 325457-93-0P
325457-94-1P 325457-95-2P 325457-96-3P
325457-97-4P 325457-98-5P 325457-99-6P

325458-00-2P 325458-01-3P 325458-02-4P
325458-03-5P 325458-05-7P 325458-08-0P
325458-09-1P 325458-11-5P 325458-13-7P
325458-14-8P 325458-15-9P 325458-16-0P
325458-17-1P 325458-18-2P 325458-19-3P
325458-21-7P 325458-22-8P 325458-23-9P
325458-25-1P 325458-26-2P 325458-27-3P
325458-32-0P
RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)
(benzanilides as **potassium channel** openers, compns., and prepn.)

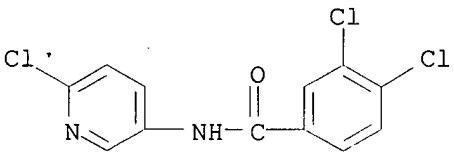
RN 304885-01-6 CAPLUS
CN Benzamide, 3,4-dichloro-N-3-pyridinyl- (9CI) (CA INDEX NAME)



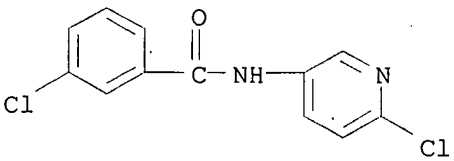
RN 325457-87-2 CAPLUS
CN Benzamide, N-(6-chloro-3-pyridinyl)-3-(trifluoromethyl)- (9CI) (CA INDEX NAME)



RN 325457-88-3 CAPLUS
CN Benzamide, 3,4-dichloro-N-(6-chloro-3-pyridinyl)- (9CI) (CA INDEX NAME)

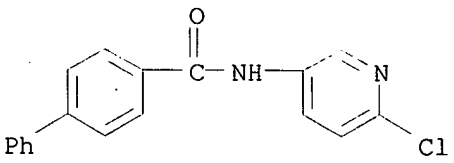


RN 325457-90-7 CAPLUS
CN Benzamide, 3-chloro-N-(6-chloro-3-pyridinyl)- (9CI) (CA INDEX NAME)

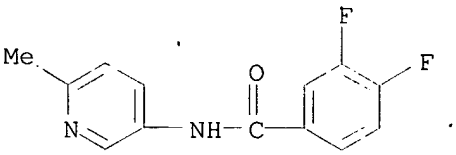


RN 325457-91-8 CAPLUS

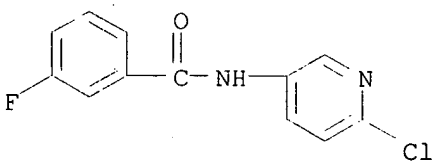
CN [1,1'-Biphenyl]-4-carboxamide, N-(6-chloro-3-pyridinyl)- (9CI) (CA INDEX NAME)



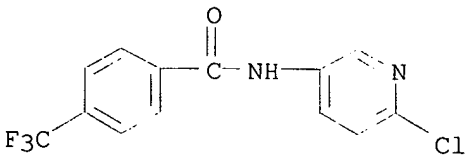
RN 325457-93-0 CAPLUS
CN Benzamide, 3,4-difluoro-N-(6-methyl-3-pyridinyl)- (9CI) (CA INDEX NAME)



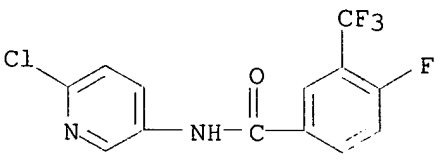
RN 325457-94-1 CAPLUS
CN Benzamide, N-(6-chloro-3-pyridinyl)-3-fluoro- (9CI) (CA INDEX NAME)



RN 325457-95-2 CAPLUS
CN Benzamide, N-(6-chloro-3-pyridinyl)-4-(trifluoromethyl)- (9CI) (CA INDEX NAME)

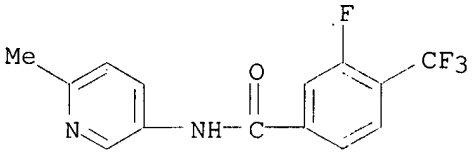


RN 325457-96-3 CAPLUS
CN Benzamide, N-(6-chloro-3-pyridinyl)-4-fluoro-3-(trifluoromethyl)- (9CI) (CA INDEX NAME)

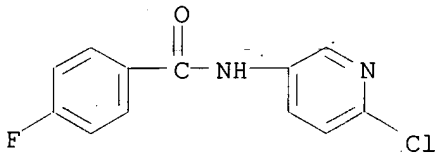


RN 325457-97-4 CAPLUS

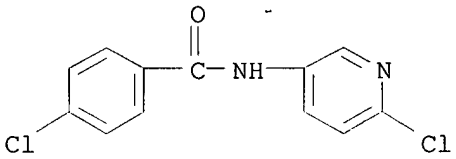
CN Benzamide, 3-fluoro-N-(6-methyl-3-pyridinyl)-4-(trifluoromethyl)- (9CI) (CA INDEX NAME)



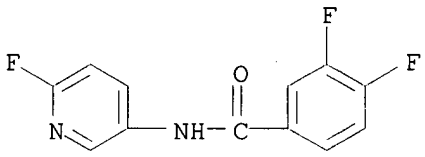
RN 325457-98-5 CAPLUS
CN Benzamide, N-(6-chloro-3-pyridinyl)-4-fluoro- (9CI) (CA INDEX NAME)



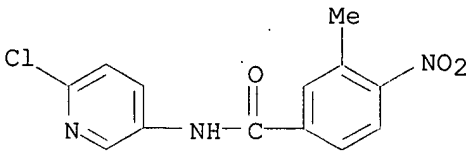
RN 325457-99-6 CAPLUS
CN Benzamide, 4-chloro-N-(6-chloro-3-pyridinyl)- (9CI) (CA INDEX NAME)



RN 325458-00-2 CAPLUS
CN Benzamide, 3,4-difluoro-N-(6-fluoro-3-pyridinyl)- (9CI) (CA INDEX NAME)

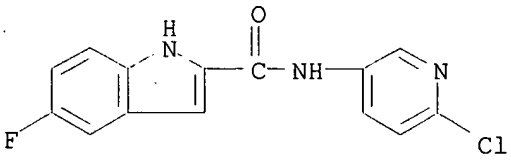


RN 325458-01-3 CAPLUS
CN Benzamide, N-(6-chloro-3-pyridinyl)-3-methyl-4-nitro- (9CI) (CA INDEX NAME)

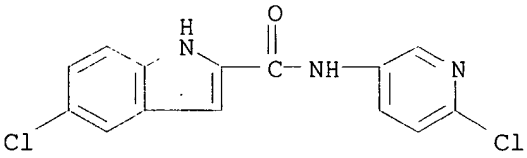


RN 325458-02-4 CAPLUS
CN 1H-Indole-2-carboxamide, N-(6-chloro-3-pyridinyl)-5-fluoro- (9CI) (CA

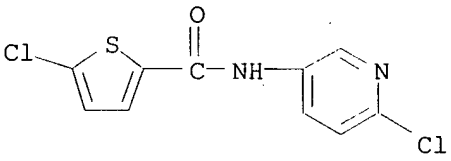
INDEX NAME)



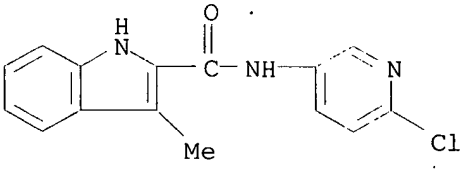
RN 325458-03-5 CAPLUS
CN 1H-Indole-2-carboxamide, 5-chloro-N-(6-chloro-3-pyridinyl)- (9CI) (CA INDEX NAME)



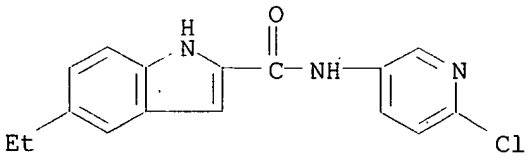
RN 325458-05-7 CAPLUS
CN 2-Thiophenecarboxamide, 5-chloro-N-(6-chloro-3-pyridinyl)- (9CI) (CA INDEX NAME)



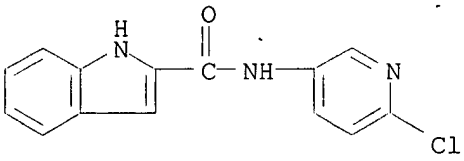
RN 325458-08-0 CAPLUS
CN 1H-Indole-2-carboxamide, N-(6-chloro-3-pyridinyl)-3-methyl- (9CI) (CA INDEX NAME)



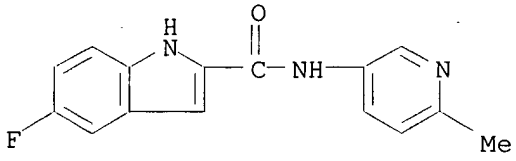
RN 325458-09-1 CAPLUS
CN 1H-Indole-2-carboxamide, N-(6-chloro-3-pyridinyl)-5-ethyl- (9CI) (CA INDEX NAME)



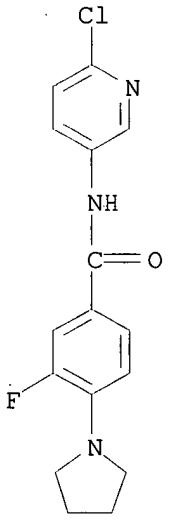
RN 325458-11-5 CAPLUS
CN 1H-Indole-2-carboxamide, N-(6-chloro-3-pyridinyl)- (9CI) (CA INDEX NAME)



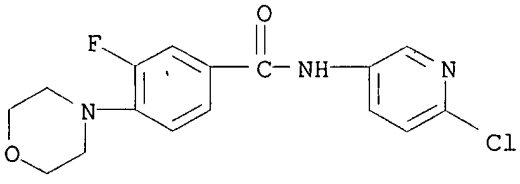
RN 325458-13-7 CAPLUS
CN 1H-Indole-2-carboxamide, 5-fluoro-N-(6-methyl-3-pyridinyl)- (9CI) (CA INDEX NAME)



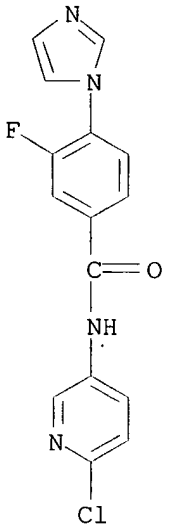
RN 325458-14-8 CAPLUS
CN Benzamide, N-(6-chloro-3-pyridinyl)-3-fluoro-4-(1-pyrrolidinyl)- (9CI) (CA INDEX NAME)



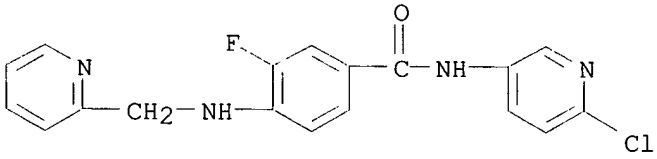
RN 325458-15-9 CAPLUS
CN Benzamide, N-(6-chloro-3-pyridinyl)-3-fluoro-4-(4-morpholinyl)- (9CI) (CA INDEX NAME)



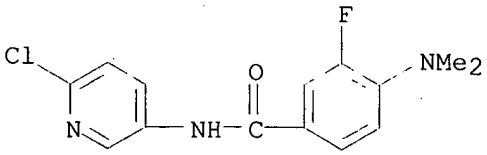
RN 325458-16-0 CAPLUS
CN Benzamide, N-(6-chloro-3-pyridinyl)-3-fluoro-4-(1H-imidazol-1-yl)- (9CI) (CA INDEX NAME)



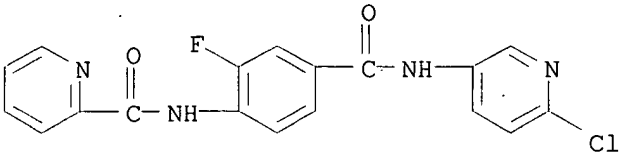
RN 325458-17-1 CAPLUS
CN Benzamide, N-(6-chloro-3-pyridinyl)-3-fluoro-4-[(2-pyridinylmethyl)amino]- (9CI) (CA INDEX NAME)



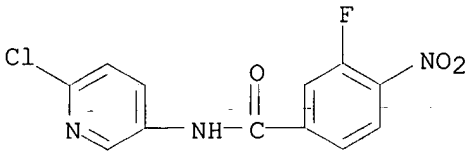
RN 325458-18-2 CAPLUS
CN Benzamide, N-(6-chloro-3-pyridinyl)-4-(dimethylamino)-3-fluoro- (9CI) (CA INDEX NAME)



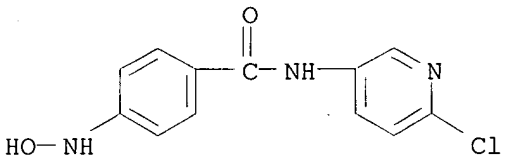
RN 325458-19-3 CAPLUS
CN 2-Pyridinecarboxamide, N-[4-[[(6-chloro-3-pyridinyl)amino]carbonyl]-2-fluorophenyl]- (9CI) (CA INDEX NAME)



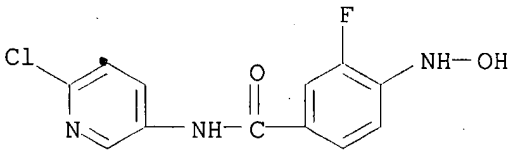
RN 325458-21-7 CAPLUS
CN Benzamide, N-(6-chloro-3-pyridinyl)-3-fluoro-4-nitro- (9CI) (CA INDEX NAME)



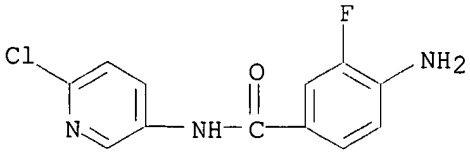
RN 325458-22-8 CAPLUS
CN Benzamide, N-(6-chloro-3-pyridinyl)-4-(hydroxyamino)- (9CI) (CA INDEX NAME)



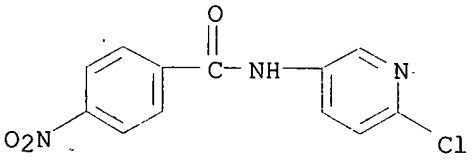
RN 325458-23-9 CAPLUS
CN Benzamide, N-(6-chloro-3-pyridinyl)-3-fluoro-4-(hydroxyamino)- (9CI) (CA INDEX NAME)



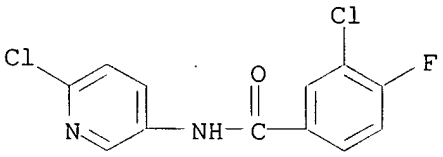
RN 325458-25-1 CAPLUS
CN Benzamide, 4-amino-N-(6-chloro-3-pyridinyl)-3-fluoro- (9CI) (CA INDEX NAME)



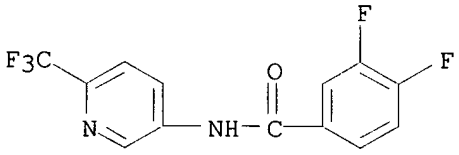
RN 325458-26-2 CAPLUS
CN Benzamide, N-(6-chloro-3-pyridinyl)-4-nitro- (9CI) (CA INDEX NAME)



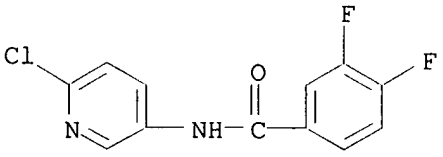
RN 325458-27-3 CAPLUS
CN Benzamide, 3-chloro-N-(6-chloro-3-pyridinyl)-4-fluoro- (9CI) (CA INDEX NAME)



RN 325458-32-0 CAPLUS
CN Benzamide, 3,4-difluoro-N-[6-(trifluoromethyl)-3-pyridinyl]- (9CI) (CA INDEX NAME)



IT **325457-89-4P**
RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)
(reaction; benzanilides as **potassium channel** openers, compns., and prepn.)
RN 325457-89-4 CAPLUS
CN Benzamide, N-(6-chloro-3-pyridinyl)-3,4-difluoro- (9CI) (CA INDEX NAME)



L153 ANSWER 14 OF 20 CAPLUS COPYRIGHT 2003 ACS on STN
ACCESSION NUMBER: 2001:916407 CAPLUS
DOCUMENT NUMBER: 136:53755
TITLE: Synthesis of nitrosated and nitrosylated (hetero)cyclic phosphodiesterase inhibitors used in treatment of sexual dysfunction
INVENTOR(S): Garvey, David S.; Saenz de Tejada, Inigo; Earl, Richard A.; Khanapure, Subhash P.

Searched by Barb O'Bryen, STIC 308-4291

PATENT ASSIGNEE(S): Nitromed, Inc., USA
SOURCE: U.S., 117 pp., Cont.-in-part of U.S. 5,958,926.
CODEN: USXXAM
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 3
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
US 6331543	B1	20011218	US 1999-387727	19990901
US 5874437	A	19990223	US 1996-740764	19961101
WO 9819672	A1	19980514	WO 1997-US19870	19971031
W: AU, CA, JP, US				
RW: AT, BE, CH, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE				
US 5958926	A	19990928	US 1998-145142	19980901
US 2002019405	A1	20020214	US 2001-941691	20010830
US 6462044	B2	20021008		
US 2003023087	A1	20030130	US 2002-216886	20020813

PRIORITY APPLN. INFO.:
US 1996-740764 A2 19961101
WO 1997-US19870 A2 19971031
US 1998-145142 A2 19980901
US 1999-387727 A1 19990901
US 2001-941691 A3 20010830

OTHER SOURCE(S): MARPAT 136:53755
GI

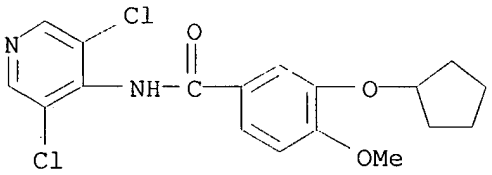
* STRUCTURE DIAGRAM TOO LARGE FOR DISPLAY - AVAILABLE VIA OFFLINE PRINT *

AB Compds. I-V, derivs. thereof, and certain substituted Ph and phthalzaine derivs. were claimed [D2 = H, alkyl, D; D = NO, NO2, alkyl, acyl, phosphoryl, silyl, etc.; A1-3 comprise the other subunits of a 5- or 6-membered monocyclic arom. ring; R8 = H, (halo)alkyl; p = 1-10; R24 = H, cyclohexyl, piperidinyl, etc., with the proviso that at least one of A1-3, J, or R24 contains T-Q or D; T = bond, O, S(O), amino; Q = NO, NO2; D1 = D or H; R37 = (hetero)aryl; R38 = H, halo, alkyl; G1 = alkyl, alkenyl or is part of a ring fused to the piperidine moiety of III; G4 = O, S; R40 = H, alkyl, haloalkyl, halo, etc.; R41 = alkyl, hydroxyalkyl, alkylcarboxy, etc.; R42 = aryl, alkylaryl, alkyloxyaryl; T1 = alkyl, oxyalkyl, thioalkyl, aminoalkyl]. Two synthetic examples were provided. E.g., the S-nitroso deriv. of the 3-mercapto-3-methylbutyric acid ester of dipyridamole (VI) was prepd. in 4 steps from dipyridamole in 3.5% overall yield. VI at doses of 10 and 30 .mu.M was more efficacious in relaxing phenylephrine-induced tissue contraction than was the known phosphodiesterase inhibitor, dipyridamole. The present invention describes novel (nitrosated/nitrosylated) phosphodiesterase inhibitors, and compns. contg. at least one (nitrosated/nitrosylated) phosphodiesterase inhibitor, and, optionally, one or more compds. that donate, transfer or release NO, elevate endogenous levels of endothelium-derived relaxing factor, stimulate endogenous synthesis of NO, or is a substrate for nitric oxide synthase and/or one or more vasoactive agents. The present invention also provides methods for treating or preventing sexual dysfunctions in males and females, for enhancing sexual responses in males and females, and for treating or preventing diseases induced by the increased metab. of cGMP, such as hypertension, pulmonary hypertension, etc.

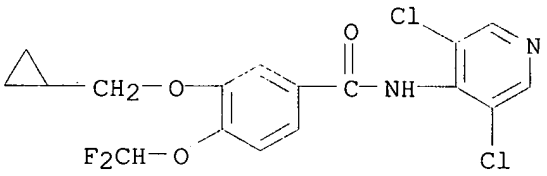
IT **144035-83-6D**, Piclamilast, nitroso derivs. **162401-32-3D**, Roflumilast, nitroso derivs.
RL: PAC (Pharmacological activity); THU (Therapeutic use); BIOL (Biological study); USES (Uses)

(synthesis of nitrosated and nitrosylated (hetero)cyclic phosphodiesterase inhibitors used in treatment of sexual dysfunction)

RN 144035-83-6 CAPLUS
CN Benzamide, 3-(cyclopentyloxy)-N-(3,5-dichloro-4-pyridinyl)-4-methoxy- (9CI) (CA INDEX NAME)



RN 162401-32-3 CAPLUS
CN Benzamide, 3-(cyclopropylmethoxy)-N-(3,5-dichloro-4-pyridinyl)-4-(difluoromethoxy)- (9CI) (CA INDEX NAME)



REFERENCE COUNT: 86 THERE ARE 86 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L153 ANSWER 15 OF 20 CAPLUS COPYRIGHT 2003 ACS on STN
ACCESSION NUMBER: 2000:420947 CAPLUS
DOCUMENT NUMBER: 133:63952
TITLE: Compositions containing nitric oxide donor and phosphodiesterase inhibitors for the treatment of anorectal disorders
INVENTOR(S): Parks, Thomas P.; Mak, Vivien; Lee, Jung-chung; Lee, Charles
PATENT ASSIGNEE(S): Cellegy Pharmaceuticals, Inc., USA
SOURCE: PCT Int. Appl., 45 pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 4
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2000035434	A2	20000622	WO 1999-US29459	19991213
WO 2000035434	A3	20001130		
W: AE, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CR, CU, CZ, DE, DK, DM, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, UZ, VN, YU, ZA, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM				
RW: GH, GM, KE, LS, MW, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG				
AU 2000021763	A5	20000703	AU 2000-21763	19991213
BR 9916162	A	20010904	BR 1999-16162	19991213
EP 1143956	A2	20011017	EP 1999-966154	19991213

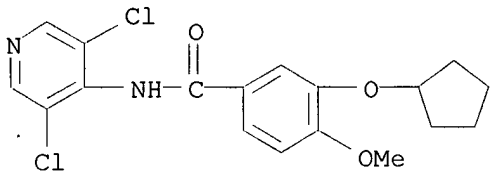
EP 1143956 A3 20011212
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, LT, FI
JP 2002542147 T2 20021210 JP 2000-587755 19991213
NO 2001002916 A 20010814 NO 2001-2916 20010613
PRIORITY APPLN. INFO.: US 1998-112325P P 19981214
US 1999-139916P P 19990617
US 1999-155318P P 19990921
WO 1999-US29459 W 19991213

AB Compns. and methods for the treatment of anorectal disorders are provided in which certain combinations of NO donors, PDE inhibitors, superoxide (O2-) scavengers, .beta.-adrenergic agonists, cAMP-dependent protein kinase activators, .alpha.1-adrenergic antagonists, L-type Ca2+ channel blockers, estrogens, ATP-sensitive K+ channel activators and smooth muscle relaxants are used. 7A topical compn. contained sildenafil 0.05-1, white petrolatum 75, paraffin wax 4, lanolin 14, and sorbitan sesquioleate 2, and propylene glycol 4% by wt.

IT **144035-83-6**, RP 73401
RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(compns. contg. nitric oxide donor and phosphodiesterase inhibitors for treatment of anorectal disorders)

RN 144035-83-6 CAPLUS

CN Benzamide, 3-(cyclopentyloxy)-N-(3,5-dichloro-4-pyridinyl)-4-methoxy- (9CI) (CA INDEX NAME)



L153 ANSWER 16 OF 20 CAPLUS COPYRIGHT 2003 ACS on STN
ACCESSION NUMBER: 2000:351357 CAPLUS
DOCUMENT NUMBER: 133:9107
TITLE: Dry powder for inhalation
INVENTOR(S): Keller, Manfred; Mueller-Walz, Rudi
PATENT ASSIGNEE(S): Skyepharma A.-G., Switz.
SOURCE: PCT Int. Appl., 44 pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: German
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2000028979	A1	20000525	WO 1999-CH528	19991110
W: AU, CA, CN, CZ, HU, IN, JP, NO, NZ, PL, RO, RU, SK, US, ZA				
RW: AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE				
AU 9964578	A1	20000605	AU 1999-64578	19991110
AU 756852	B2	20030123		
EP 1131059	A1	20010912	EP 1999-952212	19991110
EP 1131059	B1	20030305		
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, FI, RO				
JP 2002529498	T2	20020910	JP 2000-582027	19991110
NZ 511527	A	20021025	NZ 1999-511527	19991110
EP 1283036	A1	20030212	EP 2002-25796	19991110

R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, FI, CY

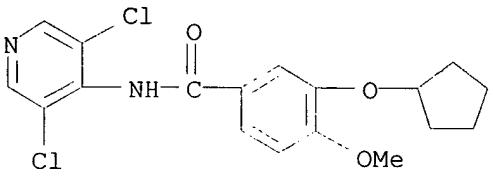
AT 233550	E	20030315	AT 1999-952212		19991110
ZA 2001003627	A	20010509	ZA 2001-3627		20010504
NO 2001002346	A	20010626	NO 2001-2346		20010511

PRIORITY APPLN. INFO.: CH 1998-2286 A 19981113
EP 1999-952212 A3 19991110
WO 1999-CH528 W 19991110

AB The moisture resistance of dry powder formulations for inhalation, which contain a pharmaceutically inert carrier of noninhalable particle size and a finely divided pharmaceutical substance of inhalable particle size, is improved and the storage stability of the formulations is increased by adding Mg stearate to minimize the deleterious effect of moisture on fine particle dose and fine particle fraction even under relatively extreme temp. and humidity conditions. Thus, 198.46 g lactose-H2O (particle size 100% <200 .mu.m, 50% <125 .mu.m, 10% <75 .mu.m) was mixed with 1 g sieved Mg stearate, then with 0.54 g formoterol fumarate-2H2O, and loaded into a multidose dry powder inhaler.

IT **144035-83-6**, Piclamilast
RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(dry powder for inhalation)

RN 144035-83-6 CAPLUS
CN Benzamide, 3-(cyclopentyloxy)-N-(3,5-dichloro-4-pyridinyl)-4-methoxy- (9CI) (CA INDEX NAME)



REFERENCE COUNT: 8 THERE ARE 8 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L153 ANSWER 17 OF 20 CAPLUS COPYRIGHT 2003 ACS on STN
ACCESSION NUMBER: 1996:596172 CAPLUS
DOCUMENT NUMBER: 125:247613
TITLE: Preparation ~~of indolines as 5-HT2B/2C~~ receptor antagonists
INVENTOR(S): Gaster, Laramie Mary; Wyman, Paul Adrian; Mulholland, Keith Raymond; Davies, David Thomas; Duckworth, David Malcom; Forbes, Ian Thomson; Jones, Graham Elgin
PATENT ASSIGNEE(S): Smithkline Beecham Plc, UK
SOURCE: PCT Int. Appl., 79 pp.
~~CODEN~~: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 9623783	A1	19960808	WO 1996-EP368	19960126

W: AL, AM, AT, AU, AZ, BB, BG, BR, BY, CA, CH, CN, CZ, DE, DK, EE, ES, FI, GB, GE, HU, IS, JP, KE, KG, KP, KR, KZ, LK, LR, LS, LT, LU, LV, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI
RW: KE, LS, MW, SD, SZ, UG, AT, BE, CH, DE, DK, ES, FR, GB, GR, IE,

IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, ML, MR, NE

CA 2212061	AA	19960808	CA 1996-2212061	19960126
AU 9646646	A1	19960821	AU 1996-46646	19960126
AU 699727	B2	19981210		
BR 9607016	A	19971028	BR 1996-7016	19960126
EP 808312	A1	19971126	EP 1996-902259	19960126
EP 808312	B1	20001102		
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI				
CN 1179156	A	19980415	CN 1996-192777	19960126
JP 10513442	T2	19981222	JP 1996-523247	19960126
RO 115522	B3	20000330	RO 1997-1439	19960126
AT 197300	E	20001115	AT 1996-902259	19960126
ES 2151652	T3	20010101	ES 1996-902259	19960126
PL 184490	B1	20021129	PL 1996-321706	19960126
ZA 9600758	A1	19970930	ZA 1996-758	19960131
IL 116998	A1	20010808	IL 1996-116998	19960201
FI 9703205	A	19971001	FI 1997-3205	19970801
NO 9703543	A	19971001	NO 1997-3543	19970801
US 5990133	A	19991123	US 1997-875506	19971016
HK 1003883	A1	20010831	HK 1998-103018	19980409
US 6235758	B1	20010522	US 1999-359606	19990723
US 2003105139	A1	20030605	US 2001-767245	20010122

PRIORITY APPLN. INFO.:

GB 1995-2052	A	19950202
GB 1995-8327	A	19950425
GB 1995-8967	A	19950503
GB 1995-16845	A	19950817
GB 1995-17542	A	19950826
GB 1995-18574	A	19950912
WO 1996-EP368	W	19960126
US 1997-875506	A3	19971016
US 1999-359606	A3	19990723

OTHER SOURCE(S): CASREACT 125:247613; MARPAT 125:247613

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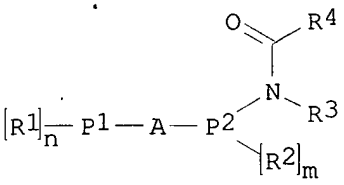

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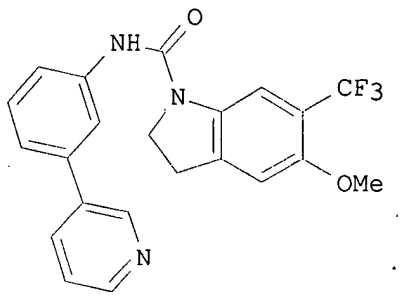


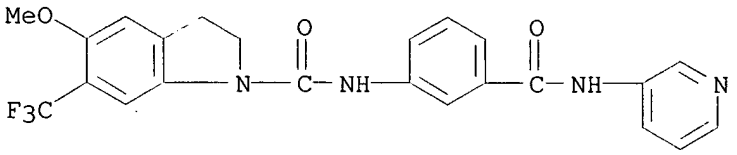
II

AB The title compds. [I; P1, P2 = Ph, arom. or partially satd. monocyclic or bicyclic heterocyclic ring; A = bond, (substituted) C1-5 alkylene, etc.; R1, R2 = H, (substituted) C1-6 alkyl, C2-6 alkenyl, etc.; R3 = H, C1-6 alkyl; R4 = 1-indolinyl, etc.; n, m = 0-2], useful in the treatment of CNS disorders such as anxiety, were prepd. Thus, treatment of 3-(3-pyridyl)aniline with 1,1-dicarbonyldiimidazole in CH2Cl2 followed by reaction of the intermediate with 5-methoxy-6-trifluoromethylindoline in DMF afforded 85% the indoline II which showed pKi of 5.8-9.7 against [3H]-mesulergine binding to rat or human 5-HT2C clones expressed in 293 cells in vitro.

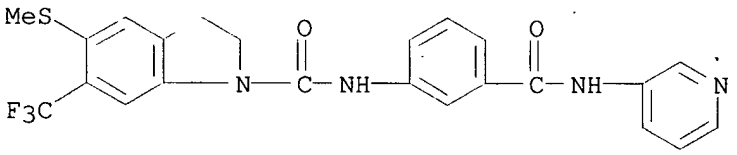
IT **181630-61-5P 181630-62-6P 181630-63-7P**
181630-64-8P 181630-65-9P
RL: BAC (Biological activity or effector, except adverse); BSU (Biological

study, unclassified); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)
(prepn. of indolines as 5-HT2B/2C receptor antagonists)

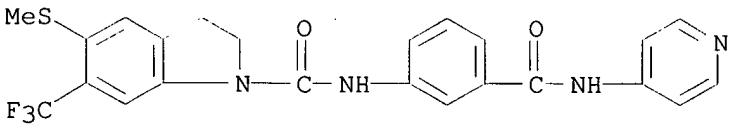
RN 181630-61-5 CAPLUS
CN 1H-Indole-1-carboxamide, 2,3-dihydro-5-methoxy-N-[3-[(3-pyridinylamino)carbonyl]phenyl]-6-(trifluoromethyl)- (9CI) (CA INDEX NAME)



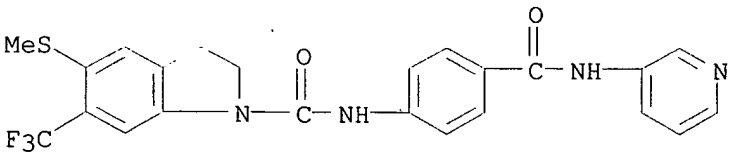
RN 181630-62-6 CAPLUS
CN 1H-Indole-1-carboxamide, 2,3-dihydro-5-(methylthio)-N-[3-[(3-pyridinylamino)carbonyl]phenyl]-6-(trifluoromethyl)- (9CI) (CA INDEX NAME)



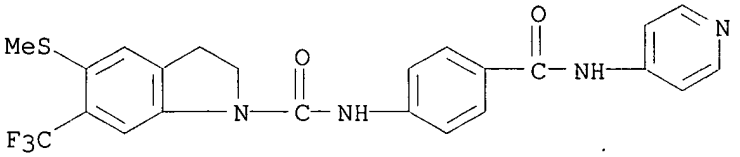
RN 181630-63-7 CAPLUS
CN 1H-Indole-1-carboxamide, 2,3-dihydro-5-(methylthio)-N-[3-[(4-pyridinylamino)carbonyl]phenyl]-6-(trifluoromethyl)- (9CI) (CA INDEX NAME)



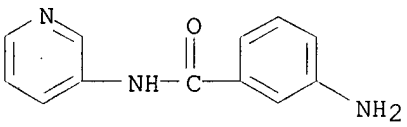
RN 181630-64-8 CAPLUS
CN 1H-Indole-1-carboxamide, 2,3-dihydro-5-(methylthio)-N-[4-[(3-pyridinylamino)carbonyl]phenyl]-6-(trifluoromethyl)- (9CI) (CA INDEX NAME)



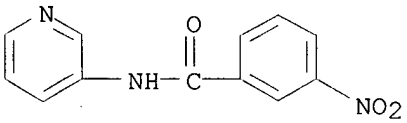
RN 181630-65-9 CAPLUS
CN 1H-Indole-1-carboxamide, 2,3-dihydro-5-(methylthio)-N-[4-[(4-pyridinylamino)carbonyl]phenyl]-6-(trifluoromethyl)- (9CI) (CA INDEX NAME)



IT **25844-48-8P 25849-49-4P**
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)
(prepn. of indolines as 5-HT2B/2C receptor antagonists)
RN 25844-48-8 CAPLUS
CN Benzamide, 3-amino-N-3-pyridinyl- (9CI) (CA INDEX NAME)



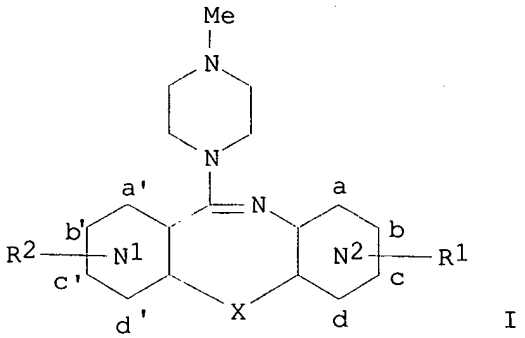
RN 25849-49-4 CAPLUS
CN Benzamide, 3-nitro-N-3-pyridinyl- (9CI) (CA INDEX NAME)



L153 ANSWER 18 OF 20 CAPLUS COPYRIGHT 2003 ACS on STN
ACCESSION NUMBER: 1995:695951 CAPLUS
DOCUMENT NUMBER: 123:83396
TITLE: Preparation and sedative and related pharmacological activity of methylpiperazinoazepine compounds
INVENTOR(S): Liegeois, Jean Francois F.; Delarge, Jacques E.
PATENT ASSIGNEE(S): Therabel Research S.A./N.V., Belg.
SOURCE: U.S., 12 pp. Cont. of U.S. Ser. No. 888,372, abandoned.
CODEN: USXXAM
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
US 5393752	A	19950228	US 1994-261237	19940614

PRIORITY APPLN. INFO.: US 1992-888372 19920526
OTHER SOURCE(S): MARPAT 123:83396
GI

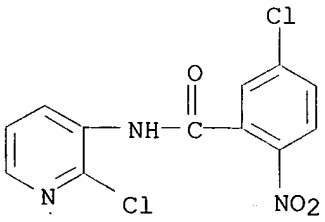


I

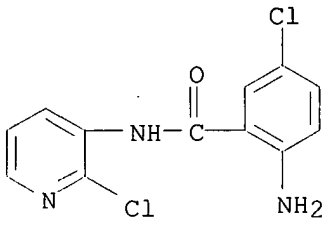
AB Methylpiperazinoazepine derivs. I or a pharmaceutically acceptable salt thereof: wherein: X represents an oxygen atom, a sulfur atom, a selenium atom or NH or NR3 group wherein R3 represents a CHO or COCF3 group or a straight or branched alkyl group of 1 to 4 carbon atoms; R1 represents a hydrogen atom, a halogen atom or a straight or branched alkyl group of 1 to 4 carbon atoms; R2 represents a hydrogen atom, a halogen atom or a straight or branched alkyl group of 1 to 4 carbon atoms; and N1 represents a benzene ring and N2 a pyridine ring or vice versa, wherein the nitrogen atom of the pyridine ring is in the b, b', d or d' position, and with the proviso that, when R1 and R2 represent hydrogen and X represents sulfur, oxygen or an NH group, N1 is pyridine and N2 is benzene and the pyridine nitrogen is excluded from position d', both N1 and N2 can be benzene when X represents a selenium atom, and both N1 and N2 can be pyridine when X represents a sulfur atom. Thus, e.g, 5,10-dihydro-11H-pyrido(4,3-b)benzo-1,5-diazepine-11-one is converted to thiolactam with P2S5; thiolactam is converted to thioether with p-nitrobenzyl chloride; reaction of thioether with N-methylpiperazine afforded pyridobenzodiazepine I [X = NH, R1 = R2 = H, N1 = pyridine with N in position b', N2 = benzene (II)] which displayed in vitro affinity for D2 dopaminergic [56.2 % inhibition (binding of 3H-spiperone)] and muscarinergic receptors [4.48 % inhibition (binding of 3H QNB)]. The sedative effect of II was intermediate between that of clozapine (20 mg/g) and haloperidol (0.63 mg/kg).

IT **149490-10-8P 149490-11-9P**
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)
(prepn. and sedative and related pharmacol. activity of methylpiperazinoazepine compds.)

RN 149490-10-8 CAPLUS
CN Benzamide, 5-chloro-N-(2-chloro-3-pyridinyl)-2-nitro- (9CI) (CA INDEX NAME)



RN 149490-11-9 CAPLUS
CN Benzamide, 2-amino-5-chloro-N-(2-chloro-3-pyridinyl)- (9CI) (CA INDEX NAME)



L153 ANSWER 19 OF 20 CAPLUS COPYRIGHT 2003 ACS on STN
ACCESSION NUMBER: 1989:75494 CAPLUS
DOCUMENT NUMBER: 110:75494
TITLE: Preparation of imidazopyridines as central nervous system agents
PATENT ASSIGNEE(S): Robins, A. H., Co., Inc., USA
SOURCE: Jpn. Kokai Tokkyo Koho, 164 pp.
CODEN: JKXXAF
DOCUMENT TYPE: Patent
LANGUAGE: Japanese
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 62292782	A2	19871219	JP 1987-143961	19870609
US 4772600	A	19880920	US 1986-871772	19860609
IL 82574	A1	19930513	IL 1987-82574	19870519
ZA 8703783	A	19880427	ZA 1987-3783	19870526
AU 8773830	A1	19871210	AU 1987-73830	19870604
AU 609720	B2	19910509		
DK 8702887	A	19871210	DK 1987-2887	19870604
NO 8702372	A	19871210	NO 1987-2372	19870605
FI 8702566	A	19871210	FI 1987-2566	19870608
HU 44545	A2	19880328	HU 1987-2617	19870608
HU 199466	B	19900228		
CA 1295329	A1	19920204	CA 1987-539043	19870608
EP 255217	A1	19880203	EP 1987-305078	19870609
EP 255217	B1	19920122		
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US 4873251	A	19891010	US 1988-215170	19880705
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PRIORITY APPLN. INFO.: US 1986-871772 19860609
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OTHER SOURCE(S): CASREACT 110:75494
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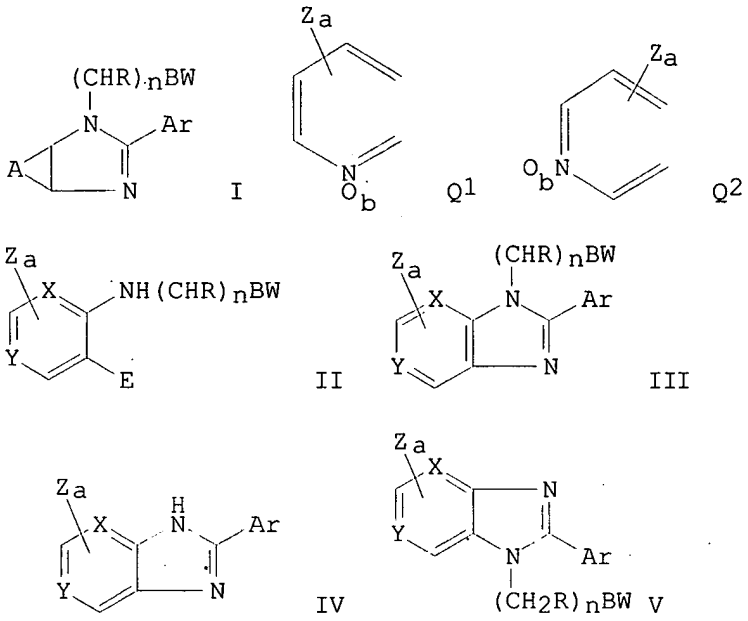
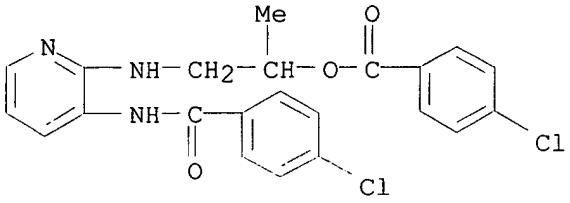


AB Title compds. I [A = Q1 (where N is either at 4 or 7-position of imidazopyridine), Q2 (where N is either at 5- or 6-position) where Z = H, halo, alkyl, OH, alkoxy, dialkylamino, NO2, a = 1, 2, b = 0, 1; n = 1-3; R = H, alkyl; Ar = (substituted) Ph, (substituted) 2-, 3-, or 4-pyridyl, (substituted) furanyl, (substituted)thienyl; B = CO, CS, CHOH; W = H, alkyl, (substituted) Ph, (substituted) phenylalkyl, hydroxyalkoxy, OH, alkoxy, (substituted) PhO, (substituted)phenylalkoxy, (substituted)amino (including heterocyclyl), OM where M = pharmaceutically acceptable metal; excluding W = H, alkyl, (substituted) Ph, (substituted)phenylalkyl when B = CHOH, and W = (substituted)Ph, (substituted)phenylalkyl, alkyl, OH, OM, alkoxy, (substituted)PhO, (substituted) phenylalkyl, alkoxyalkoxy, hydroxyalkoxy when B = CS], their optical isomers, oxides, and pharmaceutically acceptable acid-addn. salts (including hydrates and quaternary salts) are prepd., e.g. by cyclocondensation of a diaminopyridine deriv. II (E = NHCOAr; when X = N, Y = CH or vice versa) to an imidazopyridine deriv. III or alkylation of an imidazopyridine deriv. IV (X, Y = same as III) with WB(CHR)n halo (B = CO, CHOH) to an imidazopyridine deriv. V. A suspension of 2-(4-chlorophenyl)-3H-imidazo[4,5-b]pyridine-3-acetic acid and 1,1'-carbonyldiimidazole in THF was refluxed for 2.5 h, MeNH2 was added to the cooled reaction mixt. and the mixt. was stirred at room temp. overnight to give 47.5% III [Ar = 4-ClC6H4; X = N; Y = CH; Za = H; (CHR)n = CH2; BW = CONHMe], which showed .apprx.10 mg/kg i.p. ED50 of muscle relaxation in morphine-treated mice. A capsule was formulated contg. I 5.0, lactose 296.7, starch 129.0, and Mg stearate 4.3 mg.

IT **118699-28-8P**
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)
(prepn. and reaction of, in prepn. of central nervous system agent)

RN 118699-28-8 CAPLUS

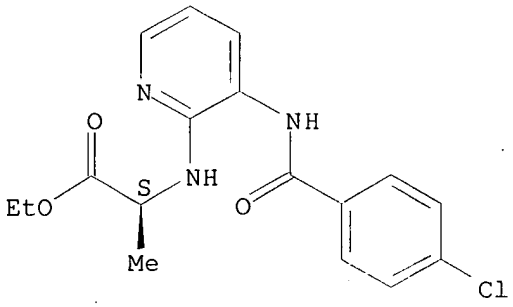
CN Benzoic acid, 4-chloro-, 2-[[3-[(4-chlorobenzoyl)amino]-2-pyridinyl]amino]-1-methylethyl ester (9CI) (CA INDEX NAME)



IT **118698-89-8P 118698-92-3P 118698-95-6P**
118698-97-8P 118698-98-9P 118699-00-6P
118699-01-7P 118699-08-4P 118699-10-8P
118699-12-0P 118699-13-1P 118699-14-2P
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)
(prepn. and reaction of, in prepn. of imidazopyridine central nervous system agents)

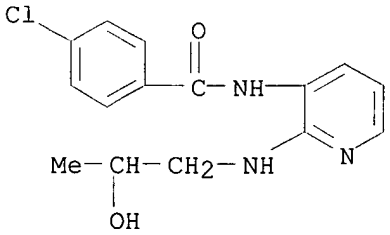
RN 118698-89-8 CAPLUS
CN L-Alanine, N-[3-[(4-chlorobenzoyl)amino]-2-pyridinyl]-, ethyl ester, monohydrochloride (9CI) (CA INDEX NAME)

Absolute stereochemistry.



● HCl

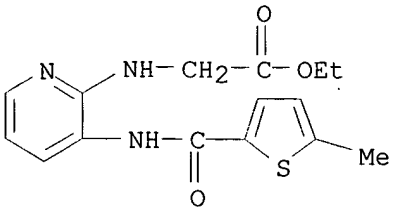
RN 118698-92-3 CAPLUS
CN Benzamide, 4-chloro-N-[2-[(2-hydroxypropyl)amino]-3-pyridinyl]-, monohydrochloride (9CI) (CA INDEX NAME)



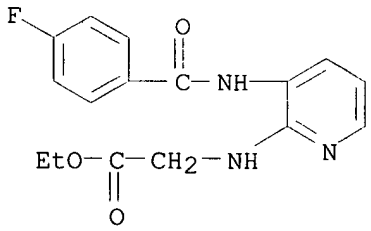
● HCl

RN 118698-95-6 CAPLUS
CN Glycine, N-[3-[[(5-methyl-2-thienyl)carbonyl]amino]-2-pyridinyl]-, ethyl

ester (9CI) (CA INDEX NAME)

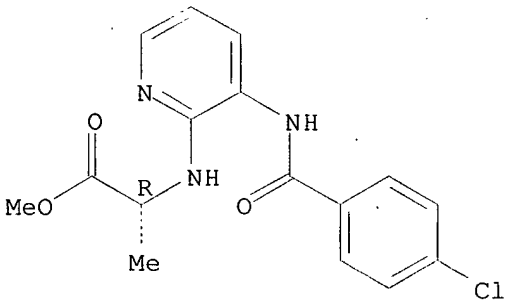


RN 118698-97-8 CAPLUS
CN Glycine, N-[3-[(4-fluorobenzoyl)amino]-2-pyridinyl]-, ethyl ester (9CI) (CA INDEX NAME)

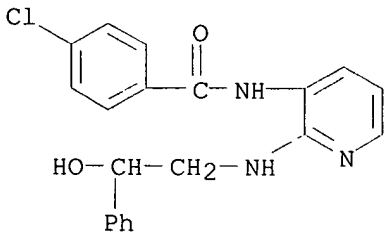


RN 118698-98-9 CAPLUS
CN D-Alanine, N-[3-[(4-chlorobenzoyl)amino]-2-pyridinyl]-, methyl ester (9CI) (CA INDEX NAME)

Absolute stereochemistry.

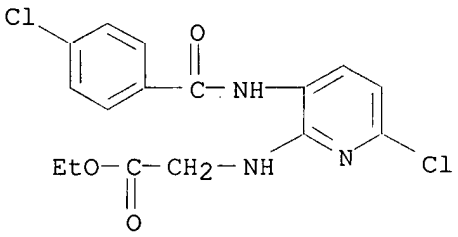


RN 118699-00-6 CAPLUS
CN Benzamide, 4-chloro-N-[2-[(2-hydroxy-2-phenylethyl)amino]-3-pyridinyl]- (9CI) (CA INDEX NAME)

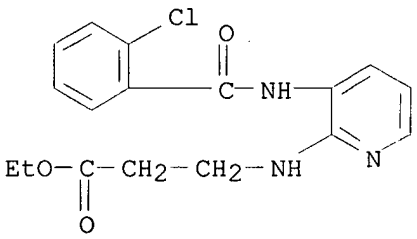


RN 118699-01-7 CAPLUS

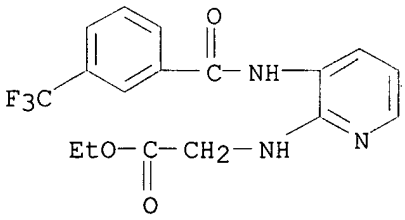
CN Glycine, N-[6-chloro-3-[(4-chlorobenzoyl)amino]-2-pyridinyl]-, ethyl ester (9CI) (CA INDEX NAME)



RN 118699-08-4 CAPLUS
CN .beta.-Alanine, N-[3-[(2-chlorobenzoyl)amino]-2-pyridinyl]-, ethyl ester (9CI) (CA INDEX NAME)



RN 118699-10-8 CAPLUS
CN Glycine, N-[3-[[3-(trifluoromethyl)benzoyl]amino]-2-pyridinyl]-, ethyl ester (9CI) (CA INDEX NAME)



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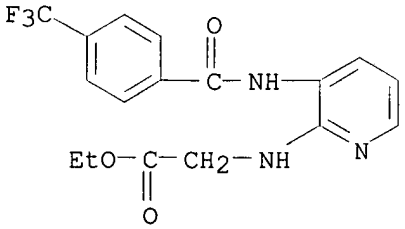
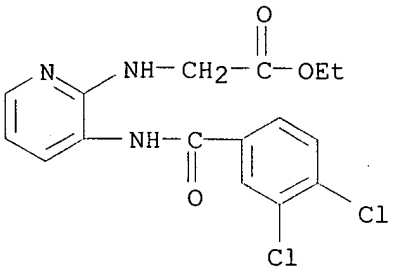
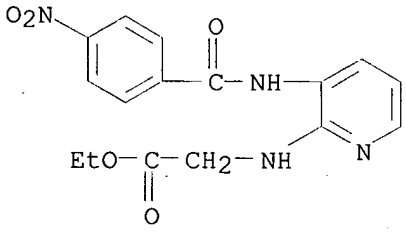
CN Glycine, N-[3-[[4-(trifluoromethyl)benzoyl]amino]-2-pyridinyl]-, ethyl ester (9CI) (CA INDEX NAME)



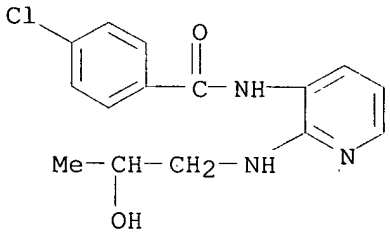
RN 118699-13-1 CAPLUS
CN Glycine, N-[3-[(3,4-dichlorobenzoyl)amino]-2-pyridinyl]-, ethyl ester (9CI) (CA INDEX NAME)



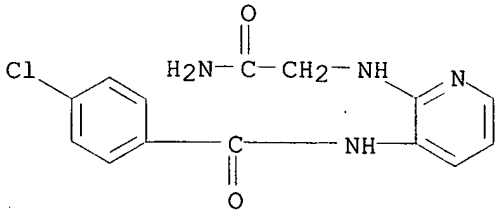
RN 118699-14-2 CAPLUS
CN Glycine, N-[3-[(4-nitrobenzoyl)amino]-2-pyridinyl]-, ethyl ester (9CI) (CA INDEX NAME)



IT **118698-91-2P 118699-09-5P 118699-11-9P**
RL: SPN (Synthetic preparation); PREP (Preparation)
(prepn. of, as intermediate for imidazopyridine central nervous system agents)
RN 118698-91-2 CAPLUS
CN Benzamide, 4-chloro-N-[2-[(2-hydroxypropyl)amino]-3-pyridinyl]- (9CI) (CA INDEX NAME)

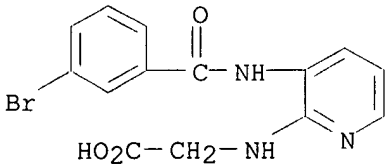


RN 118699-09-5 CAPLUS
CN Benzamide, N-[2-[(2-amino-2-oxoethyl)amino]-3-pyridinyl]-4-chloro- (9CI) (CA INDEX NAME)



RN 118699-11-9 CAPLUS

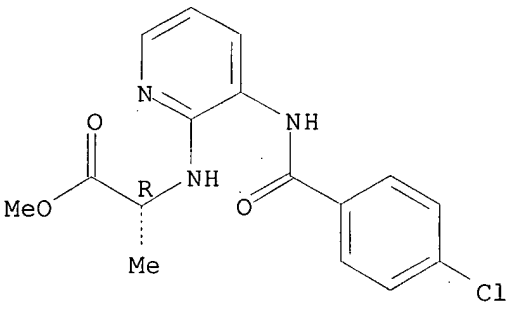
CN Glycine, N-[3-[(3-bromobenzoyl)amino]-2-pyridinyl]- (9CI) (CA INDEX NAME)



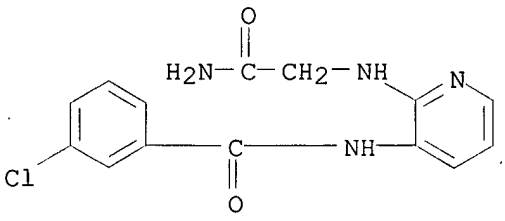
IT **118698-98-9 118699-21-1 118759-96-9**
RL: RCT (Reactant); RACT (Reactant or reagent)
(reaction of, in prepn. of imidazopyridine central nervous system agents)

RN 118698-98-9 CAPLUS
CN D-Alanine, N-[3-[(4-chlorobenzoyl)amino]-2-pyridinyl]-, methyl ester (9CI) (CA INDEX NAME)

Absolute stereochemistry.

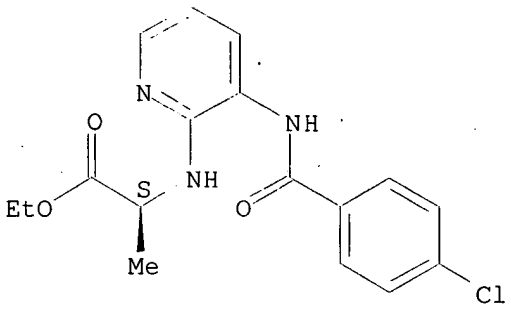


RN 118699-21-1 CAPLUS
CN Benzamide, N-[2-[(2-amino-2-oxoethyl)amino]-3-pyridinyl]-3-chloro- (9CI) (CA INDEX NAME)



RN 118759-96-9 CAPLUS
CN L-Alanine, N-[3-[(4-chlorobenzoyl)amino]-2-pyridinyl]-, ethyl ester (9CI) (CA INDEX NAME)

Absolute stereochemistry.



L153 ANSWER 20 OF 20 CAPLUS COPYRIGHT 2003 ACS on STN
ACCESSION NUMBER: 1977:468001 CAPLUS
DOCUMENT NUMBER: 87:68001
TITLE: Aminobenzamides
INVENTOR(S): Krueger, Gerd; Keck, Johannes; Noll, Klaus Reinhold; Pieper, Helmut; Ziegler, Harald; Ballhause, Helmut; Kaehling, Joachim
PATENT ASSIGNEE(S): Thomae, Dr. Karl, G.m.b.H., Fed. Rep. Ger.
SOURCE: Ger. Offen., 49 pp.
CODEN: GWXXBX
DOCUMENT TYPE: Patent
LANGUAGE: German
FAMILY ACC. NUM. COUNT: 3
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
DE 2548968	A1	19770512	DE 1975-2548968	19751103
FI 7603021	A	19770504	FI 1976-3021	19761022
NL 7611713	A	19770505	NL 1976-11713	19761022
US 4093734	A	19780606	US 1976-734818	19761022
ZA 7606385	A	19780830	ZA 1976-6385	19761025
BE 847861	A1	19770429	BE 1976-171987	19761029
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AU 7619215	A1	19780511	AU 1976-19215	19761101
NO 7603724	A	19770504	NO 1976-3724	19761102
DK 7604955	A	19770504	DK 1976-4955	19761102
SE 7612202	A	19770504	SE 1976-12202	19761102
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GB 1524578	A	19780913	GB 1976-45546	19761102
HU 172734	P	19781128	HU 1976-TO1044	19761102
FR 2329266	A1	19770527	FR 1976-33135	19761103
FR 2329266	B1	19790713		
ES 460347	A1	19780401	ES 1977-460347	19770702
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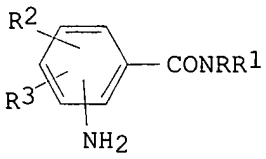


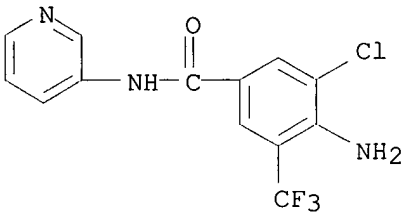
I

AB Sixty-one aminobenzamides (I; R = alkyl, cycloalkyl, heterocyclylmethyl, heterocyclyl; R1 = H or Me; R2 = H, Br, or Cl; R3 = H, substituted amino, F, NO2, CF3, etc.) which showed anticonvulsant and anxiety-inhibiting activity in mice and rats, were prepd. by treating a BzOH or BzCl deriv. with the appropriate amine, or by further treatment, e.g., halogenation, of a BzNH2 deriv. Thus, 3,2,5-(F3C)(H2N)ClC6H2COCl treated with 2-(aminomethyl)-1-ethylpyrrolidine gave I.HCl (NH2 in position 2, R = 1-ethyl-2-pyrrolidinylmethyl, R1 = H, R2 =5-Cl, R3 = 3-CF3), which had ED50 124 mg/kg after 300 min in an anticonvulsant test on mice.

IT **63497-82-5P 63497-84-7P**
RL: SPN (Synthetic preparation); PREP (Preparation)
(prepn. of)

RN 63497-82-5 CAPLUS

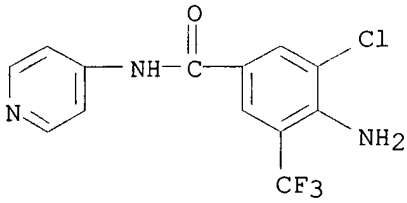
CN Benzamide, 4-amino-3-chloro-N-3-pyridinyl-5-(trifluoromethyl)-, monohydrochloride (9CI) (CA INDEX NAME)



● HCl

RN 63497-84-7 CAPLUS

CN Benzamide, 4-amino-3-chloro-N-4-pyridinyl-5-(trifluoromethyl)- (9CI) (CA INDEX NAME)



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FILE COVERS 1907-1966
FILE LAST UPDATED: 01 May 1997 (19970501/UP)

This file contains CAS Registry Numbers for easy and accurate substance identification. Title keywords, authors, patent assignees, and patent information, e.g., patent numbers, are now searchable from 1907-1966. TIFF images of CA abstracts printed between 1907-1966 are available in the PAGE display formats.

This file supports REG1stRY for direct browsing and searching of all substance data from the REGISTRY file. Enter HELP FIRST for more information.

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L147            4 SEA FILE=CAOLD ABB=ON  DISTRESS SYNDROME# OR KORO OR PSYCHASTHE
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L149            2 SEA FILE=CAOLD ABB=ON  KCNQ# OR (K OR POTASSIUM)(2A)CHANNEL#
L150            0 SEA FILE=CAOLD ABB=ON  L144 AND (L145 OR (L147 OR L148 OR
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FILE 'HOME' ENTERED AT 13:19:23 ON 04 SEP 2003
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